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# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *January 31, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[January, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Annual Reports Department of Agriculture for the Fiscal Year Ended June 30, 1899. Pp. lxx, 266, cloth.

CONTENTS.—Report of the Secretary of Agriculture—Departmental Reports: Chief of the Weather Bureau, Chemist, Entomologist, Botanist, Acting Chief of the Division of Biological Survey, Chief of the Division of Vegetable Physiology and Pathology, Pomologist, Superintendent of Experimental Gardens and Grounds, Forester, Chief of the Division of Soils, Agrostologist, Director of the Office of Experiment Stations, Director of the Office of Public Road Inquiries, Editor and Chief of Division of Publications, Librarian, Chief of the Division of Accounts and Disbursements, Chief of the Section of Foreign Markets, Chief of the Bureau of Animal Industry, Statistician.

Proceedings of the Sixteenth Annual Convention of the Association of Official Agricultural Chemists Held at San Francisco, Cal., July 5, 6, and 7, 1899. Edited by Harvey W. Wiley, Secretary of the Association. Pp. 130. (Bulletin No. 57, Division of Chemistry.) Price 10 cents.

Dietary Studies of Negroes in Eastern Virginia in 1897 and 1898. By H. B. Frissell, D. D., Principal of the Hampton Normal and Agricultural Institute, and Isabel Bevier, Professor of Chemistry at Lake Erie College. Pp. 45, pls. 3. (Bulletin No. 71, Office of Experiment Stations.) Price 5 cents.

Results of dietary studies made of families living in the region bordering the Dismal Swamp, where the style of living was very primitive and the income usually quite limited; also of families living in the neighborhood of Hampton, Va., some of them having been under the influence of Hampton Institute and being quite well to do. Others had received no such training, and were believed to be fairly representative of negroes with very little means and little or no education.

Experiment Station Record, Vol. XI, No. 4. Pp. vii, 301–400, fig. 1. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.



The Physiological Rôle of Mineral Nutrients. By Oscar Loew, of the Division of Vegetable Physiology and Pathology. Pp. 60. (Bulletin No. 18, Division of Vegetable Physiology and Pathology.) Price 5 cents.

A study of the functions of mineral nutrients in plants. The matter has been prepared primarily for teachers and experiment station workers, and is therefore treated from a technical rather than a practical standpoint.

New or Little-Known Mexican Grasses. By F. Lamson-Scribner, Agrostologist. Pp. 4, fig. 1. (Circular No. 19, Division of Agrostology.)

A list and description of sixteen Mexican grasses.

Experiments with Forage Plants in Ontario. By P. Beveridge Kennedy, Ph. D., Assistant in Division of Agrostology. Pp. 3. (Circular No. 20, Division of Agrostology.)

Report on results of experiments with grasses, clovers, vetches, millets, and soy beans.

Cooperative Range Grass and Forage Plant Experiments at Highmore, S. Dak. By F. Lamson-Scribner, Agrostologist. Pp. 10, fig. 1. (Circular No. 21, Division of Agrostology.)

Results of experiments with drought-resisting grasses and forage crops, made with a view of finding varieties suitable for use in the range regions.

Grass and Forage Plant Investigations on the Pacific Coast. By F. Lamson-Scribner, Agrostologist. Pp. 7. (Circular No. 22, Division of Agrostology.)

Results of investigations of native grasses and forage plants of the Pacific slope to determine their drought-resisting qualities and value as sand binders, etc.

Horse-Radish Culture in Bohemia. By David G. Fairchild, Agricultural Explorer. Pp. 3, figs. 2. (Circular No. 20, Division of Botany.)

Description of culture of "Maliner Kren" horse-radish as practiced at Kulenberg.

Yams in the West Indies. By David G. Fairchild, Agricultural Explorer. Pp. 4, fig. 1. (Circular No. 21, Division of Botany.)

Description of Jamaica and Barbados yams and methods of cultivation.

Monthly List of Publications, December, 1899. Pp. 4. (No. 364, Division of Publications.)

Report of the Chemist for 1899. By H. W. Wiley. Pp. iii, 25-42. (From Annual Reports, Department of Agriculture, 1899.)

Report of the Entomologist for 1899. By L. O. Howard. Pp. iii, 43-52. (From Annual Reports, Department of Agriculture, 1899.)

Report of the Botanist for 1899. By Frederick V. Coville. Pp. iii, 53-57. (From Annual Reports, Department of Agriculture, 1899.)

Report of the Acting Chief of the Division of Biological Survey for 1899. By T. S. Palmer. Pp. iii, 59-70. (From Annual Reports, Department of Agriculture, 1899.)

Report of the Chief of the Division of Vegetable Physiology and Pathology for 1899. By B. T. Galloway. Pp. iii, 71-83. (From Annual Reports, Department of Agriculture, 1899.)



- Report of the Pomologist for 1899. By G. B. Brackett. Pp. iii, 85-90. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Superintendent of Gardens and Grounds for 1899. By William Saunders. Pp. iii, 91-92. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Forester for 1899. By Gifford Pinchot. Pp. iii, 93-100. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Chief of the Division of Soils for 1899. By Milton Whitney. Pp. iii, 101-111. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Agrostologist for 1899. By F. Lamson-Scribner. Pp. iii, 113-117. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Director of the Office of Experiment Stations for 1899. By A. C. True. Pp. iii, 119-153. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Director of the Office of Public Road Inquiries for 1899. By Roy Stone. Pp. iii, 155-160. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Editor for 1899. By Geo. Wm. Hill. Pp. iii, 161-211. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Librarian for 1899. By W. P. Cutter. Pp. iii, 213-214. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Chief of the Division of Accounts and Disbursements for 1899. By F. L. Evans. Pp. iii, 215-233. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Chief of the Section of Foreign Markets for 1899. By Frank H. Hitchcock. Pp. iii, 235-241. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Chief of the Bureau of Animal Industry for 1899. By D. E. Salmon. Pp. iii, 243-262. (From Annual Reports, Department of Agriculture, 1899.)
- Report of the Statistician for 1899. By John Hyde. Pp. iii, 263-266. (From Annual Reports, Department of Agriculture, 1899.)

#### REPRINT.

- Section of Foreign Markets. By Frank H. Hitchcock, Chief. (Reprint from Yearbook of Department of Agriculture for 1897.) Pp. iii, 270-278.

#### FARMERS' BULLETINS.

- Experiment Station Work—XIII. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 3. (Farmers' Bulletin No. 107.)

CONTENTS: Fertilizer requirements of crops—Persimmons—Forcing rhubarb—Grinding corn for cows—Waste in feeding cornstalks—Molasses for farm animals—Feeding ducks—Cost of raising calves—Feeding calves with milk of tuberculous cows—Killing the germs of tuberculosis in milk—Ropy milk and cream—Dairy salt.



Saltbushes. By P. Beveridge Kennedy, Ph. D., Assistant in the Division of Agrostology. Prepared under the direction of the Agrostologist. Pp. 20, figs. 9. (Farmers' Bulletin No. 108.)

Descriptions of American and introduced saltbushes, their characteristics, composition, and food value.

#### REPRINTS.

Fowls: Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)

Experiment Station Work—IX. Prepared in the Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 92.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review. October, 1899. Vol. XXVII, No. 10. Pp. 449–502, pl. 1, figs. 3, charts 9. Price 10 cents

Monthly Weather Review. November, 1899. Vol. XXVII, No. 11. Pp. 503–533, charts 9. Price 10 cents.

Meteorological Chart of the Great Lakes. Summary for the Season of 1899. Prepared under the direction of Willis L. Moore, Chief, U. S. Weather Bureau. By Alfred J. Henry and Norman B. Conger. Vol. II, No. 9. Pp. 29, charts 12.

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1899), reporting temperature and rainfall, with special reference to their effect on crops. (No. 31, for December, 1899.)

Snow and Ice Bulletin for Tuesdays, January 2, 9, 16, 23 and 30, 1900. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATION NOT AVAILABLE.

The Crop Reporter. Vol. 1, No. 9. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 4.

A three column quarto newspaper devoted to agricultural topics. It is for the benefit and information of crop correspondents exclusively and is mailed to them only.

Approved:

JAMES WILSON,

*Secretary of Agriculture.*

GEO. WM. HILL,

*Editor and Chief.*



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# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *February 28, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[February, 1900.]

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The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

**Russian Cereals Adapted for Cultivation in the United States.** By Mark Alfred Carleton. Pp. 42, pls. 2, figs. 2. (Bulletin No. 23, Division of Botany.) Price 5 cents.

A report of an investigation of cereals of Russia suitable for introduction into the United States.

**Some Miscellaneous Results of the Work of the Division of Entomology—IV.** Prepared under the direction of L. O. Howard, Entomologist. Pp. 109, figs. 28. (Bulletin No. 22, new series, Division of Entomology.) Price 10 cents.

A series of articles and notes relating to insects injurious to trees, grains, vegetables, and flowers.

**Irrigation in the Rocky Mountain States.** By J. C. Ulrich. Pp. 64, pls. 10. (Bulletin No. 73, Office of Experiment Stations.) Price 10 cents.

Explains the agricultural conditions prevailing and the methods of acquiring and using water for irrigation practiced in that portion of the arid region covered more particularly by the States of Colorado, Wyoming, Utah, Idaho, and Montana in which the conditions and methods are somewhat similar.

**Experiment Station Record, Vol. XI, No. 5.** Pp. vi, 401–500. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts and notes on the experiment stations.

**NOTE.**—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

**Distribution of the Agricultural Exports of the United States, 1894–1898.** By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 153. (Bulletin No. 16, Section of Foreign Markets.) Price 10 cents.

Statistical report showing the distribution of agricultural exports by countries, by continents, and by articles during the five fiscal years ended June 30, 1898.



Our Trade with Japan, China, and Hongkong, 1889-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 168. (Bulletin No. 18, Section of Foreign Markets.) Price 10 cents.

A statement of the character, amount, and value of the exports and imports and distribution of trade among Japan, China, and Hongkong.

Catalogue of the First Four Thousand Samples in the Soil Collection of the Division of Soils. By Milton Whitney, Chief of Division of Soils. Pp. 145. (Bulletin No. 16, Division of Soils.) Price 10 cents.

Letters Relating to the Distribution of Vaccine. Pp. 9. (Circular No. 28, Bureau of Animal Industry.)

Complaints in regard to the distribution of vaccine by the Bureau of Animal Industry of the U. S. Department of Agriculture, and letters of the Secretary defending the action of the Bureau and stating the policy of the Department in relation to its efforts to eradicate animal diseases.

Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1900. By Henry E. Alvord, Chief of Dairy Division, Bureau of Animal Industry. Pp. 10. (Circular No. 29, Bureau of Animal Industry.)

Bur, or Globe, Artichokes. By Walter T. Swingle and David G. Fairchild, Agricultural Explorers. Pp. 6, fig. 1. (Circular No. 22, Division of Botany.)

Description of the bur artichoke, its cultivation in Europe and Louisiana, and methods of cooking.

Monthly List of Publications, January, 1900. Pp. 4. (No. 366, Division of Publications.)

#### REPRINTS.

Some Results of Dietary Studies in the United States. By A. P. Bryant, of the Office of Experiment Stations. Reprint from Year-book of Department of Agriculture for 1898. Pp. ii, 439-452.

#### FARMERS' BULLETINS.

Farmers' Reading Courses. Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey. Pp. 20. (Farmers' Bulletin No. 109.)

History of origin and development of farmers' reading courses, description of their main features, and suggestions as to how such courses may be organized.

Rice Culture in the United States. By Dr. S. A. Knapp. Pp. 28. (Farmers' Bulletin No. 110.)

A history of the introduction of rice into the United States, the conditions of production, areas of land suitable for rice culture, American methods of using machinery in rice fields, and other matters relating to rice growing.

#### REPRINTS.

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)



- Weeds: And How to Kill Them. By Lyster H. Dewey, Assistant Botanist. Pp. 32, figs. 11. (Farmers' Bulletin No. 28.)
- Onion Culture. By R. L. Watts, B. Agr., Instructor in Horticulture at the University of Tennessee and Horticulturist of the Tennessee Agricultural Experiment Station. Pp. 31, figs. 3. (Farmers' Bulletin No. 39.)
- Farm Drainage. By C. G. Elliott, C. E., Member of the American Society of Civil Engineers, Peoria, Illinois. Pp. 24, figs. 6. (Farmers' Bulletin No. 40.)
- Sheep Feeding. By John A. Craig, Professor of Animal Husbandry in the University of Wisconsin. (Under the Supervision of the Office of Experiment Stations.) Pp. 24. (Farmers' Bulletin No. 49.)
- The Soy Bean as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist. With an appendix on Soy Beans as Food for Man. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 24, figs. 5. (Farmers' Bulletin No. 58.) Revised edition.
- Bee Keeping. By Frank Benton, M. S., Assistant Entomologist. Pp. 32, figs. 19. (Farmers' Bulletin No. 59.)
- Some Essentials in Beef Production. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 24, figs. 17. (Farmers' Bulletin No. 71.)
- Cowpeas. By Jared G. Smith, Assistant Agrostologist. Pp. 16, fig. 1. (Farmers' Bulletin No. 89.)
- Experiment Station Work—X. Prepared in the Office of Experiment Stations. Pp. 32, figs. 5. (Farmers' Bulletin No. 97.)
- Breeds of Dairy Cattle. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. Reprinted from the Report of the Bureau of Animal Industry for 1898. Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1899), reporting temperature and rainfall, with special reference to their effect on crops. (No. 1, for January, 1900.)

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Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes



## PUBLICATIONS NOT AVAILABLE.

Operations of the Bureau of Animal Industry. Letter from the Secretary of Agriculture transmitting Annual Report of the Bureau of Animal Industry for the fiscal year ended June 30, 1899. Pp. 71. (Senate Doc. No. 100, 56th Cong., 1st Sess.)

The Crop Reporter. Vol. 1, No. 10. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 4.

A three column quarto newspaper devoted to agricultural topics. It is for the benefit and information of crop correspondents exclusively and is mailed to them only.

Approved:

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*Secretary of Agriculture.*

GEO. WM. HILL,

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# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *March 31, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[March 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Studies on American Grasses. The North American Species of *Chætochloa*. By F. Lamson-Scribner and Elmer D. Merrill. Pp. 44, figs. 24. (Bulletin No. 21, Division of Agrostology.) Price 5 cents.

Descriptions of 28 American grasses.

Notes Upon Dairying in California and The Export of California Butter to the Orient. By R. A. Pearson, M. S., Assistant Chief of Dairy Division. Prepared under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 29; pls. 4, fig. 1. (Bulletin No. 24, Bureau of Animal Industry.) Price 5 cents.

A report upon the present condition of the dairy industry in California and the possibilities of supplying dairy products suitable for export from the Pacific coast.

Experiment Station Record, Vol. XI, No. 6, Pp. v, 501–600, figs. 5. Price 10 cents.

Experiment Station Record, Vol. XI, No. 7. Pp. v, 601–700. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts and notes on the experimental stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

Accessions to the Department Library, October–December, 1899. Pp. 23. (Library Bulletin No. 30.) Price 5 cents.

The Work of the Agricultural Experiment Stations on Tobacco. Abstracted by J. I. Schulte, Office of Experiment Stations, With Introduction and Comments by Milton Whitney, Chief, Division of Soils. Pp. 48. (Report No. 63.) Price 5 cents.

Abstracts of reports of investigations in raising and curing tobacco, carried on by the experiment stations in the United States and Canada.



The Lebbek or Siris Tree. By David G. Fairchild, Agricultural Explorer. Pp. 4, figs. 2. (Circular No. 23, Division of Botany.)  
Description, method of culture, and uses of the lebbek tree of Egypt.

Red Clover Seed. By Adrian J. Pieters, Assistant in Charge of Pure-seed Investigations. Pp. 5, figs. 2. (Circular No. 24, Division of Botany.)

Treats of the quality of clover seed and its adulterants and calls attention of farmers to the necessity of purchasing good seed.

How to Distinguish the Different Mosquitoes of North America. By L. O. Howard, Entomologist. Pp. 7, figs. 3. (Circular No. 40, second series, Division of Entomology.)

List of Publications of the Office of Experiment Stations on the Food and Nutrition of Man. Pp. 6. (No. 328, revised, Office of Experiment Stations.)

Publications of the U. S. Department of Agriculture for sale by the Superintendent of Documents, Union Building, Washington, D. C. Corrected to February 1, 1900. Pp. 37. (No. 179, Division of Publications—6th edition.)

Monthly List of Publications, February, 1900. (No. 371, Division of Publications.)

The Soils of the Pecos Valley, New Mexico. By Thos. H. Means and Frank D. Gardner, Assistants, Division of Soils. Pp. 7. (Circular No. 3, Division of Soils.)

A brief review of the work accomplished by a party sent to map the soils of the irrigated districts of the Pecos Valley, New Mexico, with particular reference to the extent of and damage from "alkali" and seepage waters, and to investigate methods for the prevention of further damage and for the reclamation of lands already abandoned from these causes.

The Soils of Salt Lake Valley, Utah. By Frank D. Gardner, Assistant, Division of Soils, and John Stewart, Assistant Chemist, Utah Experiment Station. Pp. 11, fig. 1. (Circular No. 4, Division of Soils.)

Results of a survey of that portion of Salt Lake County lying immediately west of the Jordan River and extending to the Great Salt Lake and the Oquirrh Mountains on the west, for the purpose of mapping the soils with particular reference to the extent of and damage from alkali and seepage waters.

Bulk Fermentation of Connecticut Tobacco. By Marcus L. Floyd, Tobacco Expert, Division of Soils. Pp. 10. (Circular No. 5, Division of Soils.)

Report of results attained in fermenting Connecticut tobacco by the bulk method used in Sumatra, Cuba, and Florida.

#### FARMERS' BULLETINS.

The Apple and How to Grow It. By G. B. Brackett, Pomologist. Pp. 32, figs. 10. (Farmers' Bulletin No. 113.)

Embraces topics intended especially for the guidance of the farmer in the propagation, cultivation, and care of the family orchard, but also contains information for those who desire to consider the commercial side of the question.



## REPRINTS.

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 32. (Farmers' Bulletin No. 22.)

Foods: Nutritive Value and Cost. By W. O. Atwater, Ph. D., Professor of Chemistry in Wesleyan University. Pp. 32, figs. 2. (Farmers' Bulletin No. 23.)

Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42, (Farmers' Bulletin No. 51.) Revised edition.

Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. 9. (Farmers' Bulletin No. 63.)

Ducks and Geese: Standard Breeds and Management. By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)

The Black Rot of the Cabbage. By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 22, fig. 1. (Farmers' Bulletin No. 68.)

Tomato growing. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture, Rutgers College, New Brunswick, N. J. Pp. 30. (Farmers' Bulletin No. 76.)

The Culture of Tobacco. By Otto Carl Butterweck. Pp. 24. (Farmers' Bulletin No. 82.)

Alkali Lands. By Milton Whitney and Thomas H. Means. Pp. 23, fig. 1. (Farmers' Bulletin No. 88.)

Cowpeas. By Jared G. Smith, Assistant Agrostologist. Pp. 16, fig. 1. (Farmers' Bulletin No. 89.)

Potato Diseases and Their Treatment. By B. T. Galloway, Chief of the Division of Vegetable Physiology and Pathology. Pp. 12, figs. 4. (Farmers' Bulletin No. 91.)

Good Roads For Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)

Suggestions to Southern Farmers. Prepared in the Division of Publications. Pp. 48. (Farmers' Bulletin No. 98.)

Hog Raising in the South. By S. M. Tracy, M. S., Formerly Director of the Mississippi Agricultural Experiment Station. Pp. 40. (Farmers' Bulletin No. 100.)

## PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review. January 1900. Vol. XXVIII, No. 1. Pp. 1-49, charts 10. Price 10 cents.



The Climate of San Francisco, California. Prepared under direction of Willis L. Moore, Chief United States Weather Bureau, by Alexander G. M'Adie and George H. Willson. Pp. 30, Charts 5. (Bulletin No. 58, Weather Bureau.) Price 15 cents.

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Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

The Two Most Abundant Pulvinarias on Maple. By L. O. Howard, Entomologist. Pp. 7-23, figs. 17. (Reprint from Bulletin 22, new series, Division of Entomology.)

The Insects to Which the Name "Kissing Bug" Became Applied During the Summer of 1899. By L. O. Howard, Entomologist. Pp. 24-30, figs. 7. (Reprint from Bulletin 22, new series, Division of Entomology.)

Insect Control in Riverside, California. By Felix G. Havens. Pp. 83-88. (Reprint from Bulletin 22, new series, Division of Entomology.)

Artificial Changes of Physical Properties of Soils. By Ewald Wollny, Ph. D., Professor in the Technical High School at Munich. Pp. iii, 604-612. (Reprinted from Experiment Station Record, Vol. XI, No. 7.)

The Crop Reporter. Vol. 1, No. 11. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 4.

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Approved:

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*Secretary of Agriculture.*

GEO. WM. HILL,

*Editor and Chief.*



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# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *April 30, 1900.*

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Cooperative Experiments with Grasses and Forage Plants. By P. Beveridge Kennedy, Ph. D., Expert and Agent in Charge of Experimental Work. Prepared under the direction of F. Lamson-Scribner, Agrostologist. Pp. 86, pls. 13, fig 1. (Bulletin No. 22, Division of Agrostology.) Price 15 cents.

Reports of volunteer experimenters with seeds of grasses and forage plants.

The Germination of Seeds as Affected by Certain Chemical Fertilizers. By Gilbert H. Hicks. Pp. 15, pls. 2. (Bulletin No. 24, Division of Botany.) Price 5 cents.

Results of a number of experiments made to ascertain the effect of different chemical fertilizers upon the sprouting of seeds.

Notes on Useful Plants of Mexico. By J. N. Rose. (Reprinted from Contributions from the U. S. National Herbarium, Vol. V, No. 4, issued October 31, 1899.) Pp. iv, 209–259, vii, pls. 30, figs. 2.

Organization Lists of the Agricultural Colleges and Experiment Stations in the United States, with a List of Agricultural Experiment Stations in Foreign Countries. Pp. 121. (Bulletin No. 74, Office of Experiment Stations.) Price 10 cents.

Dietary Studies of University Boat Crews. By W. O. Atwater and A. P. Bryant. Pp. 72. (Bulletin No. 75, Office of Experiment Stations.) Price 5 cents.

Results of dietary studies of Harvard and Yale University boat crews while in training for races in May and June, 1898.

Proceedings of the Thirteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations Held at San Francisco, Cal., July 5–7, 1899. Edited by A. C. True and W. H. Beal, for the Office of Experiment Stations, and H. H. Goodell for the Executive Committee of the Association. Pp. 112. (Bulletin No. 76, Office of Experiment Stations.) Price 10 cents.



Statistics of the Land-Grant Colleges and Agricultural Experiment Stations in the United States for the Year Ended June 30, 1899. Pp. 39. (Bulletin No. 78, Office of Experiment Stations.) Price 5 cents.

Experiment Station Record, Vol. XI, No. 8. Pp. v, 701-800. Price 10 cents.

The record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

The Cotton Crop of 1898-99. By James L. Watkins, Division of Statistics. Pp. 32. (Miscellaneous series.—Bulletin No. 17, Division of Statistics.) Price 5 cents.

Progress of Experiments in Forage Crops and Range Improvement at Abilene, Tex. By H. L. Bently, Special Agent in Charge of Experiments at Abilene, Tex. Pp. 20, fig. 1. (Circular No. 23, Division of Agrostology.)

Cowpeas and Corn for Silage and Fodder. By W. Gettys. Pp. 10, figs 2. (Circular No. 24, Division of Agrostology.)

Methods of handling cowpeas and corn together for silage and fodder.

The Seed of Beardless Brome Grass. By A. J. Pieters, In Charge of Pure Seed Investigations. Pp. 5, fig. 1. (Circular No. 25, Division of Botany.)

Characters of the seed, points that determine its quality, some of its adulterants, and simple methods by which buyers may themselves test their seed.

Egyptian Cotton in the United States. By Lyster H. Dewey, Assistant Botanist. Pp. 9. (Circular No. 26, Division of Botany.)

Describes several varieties of Egyptian Cotton and experiments with the seed and compares the conditions, seasons, soils, temperature, and rainfall in the United States with those in Egypt.

The Hessian Fly By C. L. Marlatt, First Assistant Entomologist. Pp. 4. (Circular No. 12, second series, Division of Entomology.) Revised edition.

Monthly List of Publications, March, 1900. Pp. 4. (No. 372, Division of Publications.)

List of Bulletins and Circulars issued by the U. S. Department of Agriculture and Available For Free Distribution. Pp. 21. (No. 247, Division of Publications.) Fifth edition. Corrected to April 1, 1900.

The Social, Commercial, and Economic Phases of the Road Subject. Pp. 8. (Circular No. 34, Office of Public Road Inquiries.)

An article by Mr. W. H. Moore, of Missouri, President of the State and Interstate Good Roads and Public Improvement Association.

Crop Circular for April, 1900. By John Hyde, Statistician. Pp. 4. (Circular, Division of Statistics.)

Report on condition of winter wheat and winter rye, and losses of farm animals.



## REPRINTS.

Methods and Results of Investigations on the Chemistry and Economy of Food. By W. O. Atwater, Ph. D., Professor of Chemistry in Wesleyan University, Director of the Storrs (Conn.) Agricultural Experiment Station, and Special Agent of the United States Department of Agriculture. Pp. 222. (Bulletin No. 21, Office of Experiment Stations.) Price 15 cents

Description of a New Respiration Calorimeter and Experiments on the Conservation of Energy in the Human Body. By W. O. Atwater, Ph. D., Professor of Chemistry, Wesleyan University, and E. B. Rosa, Ph. D., Professor of Physics, Wesleyan University. Pp. 94, pls. 8, figs. 12. (Bulletin No. 63, Office of Experiment Stations.) Price 10 cents.

Timber: An Elementary Discussion of the Characteristics and Properties of Wood. By Filibert Roth, Special Agent in Charge of Timber Physics. Under the direction of B. E. Fernow, Chief of the Division of Forestry. Pp. 88, figs. 49. (Bulletin No. 10, Division of Forestry.) Price 10 cents.

Arbor Day: Its History and Observance. By N. H. Egleston. Pp. 80, figs. 29. (Revised Edition.)

Butter Substitutes. By E. A. de Schweinitz, Ph. D., M. D., Biochemic Laboratory, Bureau of Animal Industry, U. S. Department of Agriculture. Pp. 445-452. (Reprinted from the Yearbook of the U. S. Department of Agriculture for 1895.)

## FARMERS' BULLETINS.

The Farmer's Interest in Good Seed. By A. J. Pieters, In Charge of Pure Seed Investigations, Division of Botany. Pp. 24, figs. 7. (Farmers' Bulletin No. 111.)

Calls attention to the wide range in quality of seed offered for sale; gives results of some tests of seeds, and tells the farmer how to secure good seed.

Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared under the supervision of the Office of Experiment Stations, A. C. True, Director. Pp. 39, figs. 3. (Farmers' Bulletin No. 112.)

Describes various methods of bread making, the grains, yeast, and other leavening agencies, baking and cooking, chemical composition, imperfections and impurities, nutritive value, cost, etc.

Experiment Station Work—XIV. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 28, figs. 5. (Farmers' Bulletin No. 114.)

CONTENTS: Influence of salt and similar substances on soil moisture—Extra early potatoes—Rotting of cranberries—Chestnuts—Low-grade Paris green—Crude petroleum as an insecticide—Skim milk in bread making—Best number of hens in one pen—Nest box for egg records—Profitable and unprofitable cows.

## REPRINTS.

Peanuts: Culture and Uses. By R. B. Handy, of the Office of Experiment Stations. Pp. 24, fig. 1. (Farmers' Bulletin No. 25.)

Souring of Milk and Other Changes in Milk Products. Prepared in the Office of Experiment Stations. Pp. 23. (Farmers' Bulletin No. 29.)



- Alfalfa, or Lucern. By Jared G. Smith, Assistant Agrostologist. Pp. 24, figs. 3. (Farmers' Bulletin No. 31.)
- Peach Growing for Market. By Edwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 24, figs. 21. (Farmers' Bulletin No. 33.)
- Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)
- Spraying for Fruit Diseases. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. 12, figs. 6. (Farmers' Bulletin No. 38.)
- Fowls: Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)
- Commercial Fertilizers: Composition and Use. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations, and Professor of Agriculture in Rutgers College. Under the supervision of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 44.)
- Some Insects Injurious to Stored Grain. By F. H. Chittenden, Assistant Entomologist. Pp. 24, figs. 18. (Farmers' Bulletin No. 45.) Revised edition.
- The Sugar Beet: Culture, Seed Developement, Manufacture, and Statistics. By H. W. Wiley, Chief of the Division of Chemistry, and formerly Director of the Department Sugar Beet Experiment Station in Nebraska. Pp. 48, figs. 24. (Farmers' Bulletin No. 52.) Revised edition.
- How to Grow Mushrooms. By William Falconer. Under the Supervision of the Division of Vegetable Physiology and Pathology. Pp. 20, figs. 14. (Farmers' Bulletin No. 53.)
- Some Common Birds in Their Relation to Agriculture. By F. E. L. Beal, B. S., Assistant Ornithologist, Biological Survey. Pp. 40, figs. 22. (Farmers' Bulletin No. 54.) Revised edition.
- The Dairy Herd: Its Formation and Management. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted, with revision by the author, from the Yearbook of the U. S. Department of Agriculture for 1894.) Pp. 24. (Farmers' Bulletin No. 55.)
- Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under Supervision of Dairy Division, Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 57.)
- Meadows and Pastures: Formation and Cultivation in the Middle Eastern States. By Jared G. Smith, Assistant Agrostologist. Pp. 28, figs. 9. (Farmers' Bulletin No. 66.) Revised edition.
- Tobacco Soils. By Milton Whitney, Chief of Division of Soils. Pp. 23, fig. 1. (Farmers' Bulletin No. 83.)
- Thirty Poisonous Plants of the United States. By V. K. Chesnut, Assistant Botanist, U. S. Department of Agriculture. Pp. 32, figs 24. (Farmers' Bulletin No. 86.)



Sugar as Food. By Mary Hinman Abel. Prepared under supervision of Office of Experiment Stations. Pp. 27. (Farmers' Bulletin No. 93.)

The Vegetable Garden. By Charles H. Greathouse, A. M., Division of Publications. Pp. 24, figs. 8. (Farmers' Bulletin No. 94.)

Raising Sheep for Mutton. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 48, figs. 18. (Farmers' Bulletin No. 96.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review, Vol. XXVII, No. 13. Annual Summary for 1899. Pp. ix, 577-597, charts 4. Price 10 cents.

Monthly Weather Review. February, 1900. Vol. XXVIII, No. 2. Pp. 51-93, charts 11, pl. 1. Price 10 cents.

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (No. 3, for the month of March and Nos. 4, 5, 6, and 7 for April, 1900.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

(The following were reprinted from the Proceedings of the Thirteenth Annual Convention of the Association of American Colleges and Experiment Stations. Bulletin No. 76, Office of Experiment Stations.)

Annual Address of the President of the Association of American Agricultural Colleges and Experiment Stations. 1899. By H. P. Armsby, Ph. D., Director of the Pennsylvania Experiment Station. Pp. 21-28.

Memorial Address on Honorable Justin S. Morrill. By M. H. Buckingham, D. D., President of the University of Vermont. Pp. 30-36.

Agricultural Education—Practical and Scientific. By W. M. Liggett, Dean of the College of Agriculture of the University of Minnesota. Pp. 48-52.

Methods of Seed Testing and Their Relation to the Farm and Garden. By A. J. Pieters, Division of Botany, U. S. Department of Agriculture. Pp. 55-59.

The Principles Underlying the Formation of An Agricultural Course in the South. By C. E. Coates, jr., Ph. D., Professor of Chemistry, Louisiana State University and Agricultural and Mechanical College. Pp. 59-64.

The Inspection of Nursery Stock and Orchards. By Alexander Craw, Quarantine Officer of the California State Board of Horticulture. Pp. 87-90.



Making a Garden Herbarium and Its Uses. By A. D. Selby, B. S., Botanist, Ohio Experiment Station. The Making of a Horticultural Herbarium. By J. Burt Davy, Assistant Botanist, California Experiment Station. Laboratory Work for Winter Instruction in Horticulture. By E. S. Goff, Horticulturist, Wisconsin Experiment Station. Pp. 92-96.

The Practical Importance of Industrials. By W. F. Gilkison, B. S., Professor of Mechanics, University of Wyoming. Pp. 96-98.

The Electrical Engineering Laboratory in its Relations to Local Engineering Work. By C. L. Cory, M. M. E., Associate Professor of Electrical Engineering, University of California. Pp. 99-103.

The Agricultural Engineer. By W. T. Magruder, M. E., Professor of Mechanical Engineering, Ohio State University. Pp. 103-105.

Some Objections to Early Differentiation of Engineering Courses. By J. C. Nagle, C. E., Professor of Civil Engineering and Physics, State Agricultural and Mechanical College of Texas. Pp. 106-109.

Third Report on the Investigations of the Agricultural Capabilities of Alaska. 1899. By C. C. Georgeson, M. S., Special Agent in Charge of Alaska Investigations. Pp. 55, pls. 17. (H. R. Doc. No. 314, 56th Cong., 1st sess.)

The Crop Reporter. Vol. 1, No. 12. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 4.

A three column quarto newspaper devoted to agricultural topics. It is for the benefit and information of crop correspondents exclusively and is mailed to them only.

Approved:

JAMES WILSON,

*Secretary of Agriculture.*

GEO. WM. HILL,

*Editor and Chief.*



## NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the Superintendent of Documents, Union Building, Washington, D. C., and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than one copy of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.







This circular will be sent regularly to all who apply for it.

# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *May 31, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[May, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

**Economic Grasses.** By F. Lamson-Scribner, Agrostologist. Pp. 85, pls. 3, figs. 91. (Bulletin No. 14, Division of Agrostology.) Revised Edition. Price 10 cents.

Describes the more important economic grasses of this country, or those which have been introduced because possessing some merit.

**The Structure of the Caryopsis of Grasses with Reference to Their Morphology and Classification.** By P. Beveridge Kennedy, Ph. D., Expert and Agent in Charge of Experimental Work. Prepared under the direction of F. Lamson-Scribner, Agrostologist. Pp. 44, pls. 8. (Bulletin No. 19, Division of Agrostology.) Revised edition. Price 10 cents.

**American Grasses—III. (Illustrated.)** Descriptions of the Tribes and Genera. By F. Lamson-Scribner, Agrostologist. Pp. 197, figs. 137. (Bulletin No. 20, Division of Agrostology.) Price 15 cents.

Descriptions of 137 American grasses.

**Some Insects Injurious to Garden Crops.** A Series of Articles Dealing with Insects of this Class. Prepared, under the direction of the Entomologist, by F. H. Chittenden, Assistant Entomologist. Pp. 92, figs. 23. (Bulletin No. 23, new series, Division of Entomology.) Price 10 cents.

**The Digestibility of American Feeding Stuffs.** By Whitman H. Jordan, Director, and Frank H. Hall, Librarian, New York Agricultural Experiment Station, Geneva. Pp. 100. (Bulletin No. 77, Office of Experiment Stations.) Price 10 cents.

Summary of the results of experiments made at the experiment stations in the United States on the digestibility of feeding stuffs by animals.

**Farmers' Institutes: History and Status in the United States and Canada.** By L. H. Bailey, M. S., Professor of Horticulture, Cornell University. Pp. 34. (Bulletin No. 79, Office of Experiment Stations.) Price 10 cents.

**Sources of the Agricultural Imports of the United States, 1894–1898.** By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 118. (Bulletin No. 17, Office of Foreign Markets.) Price 10 cents.

Statistical report showing in detail the quantities and values of the various agricultural products imported into the United States during each of the five fiscal years 1894–1898 and principal countries whence imported.

**Accessions to the Department Library.** January–March, 1900. Pp. 25. (Library Bulletin No. 31.) Price 5 cents.

The Crop Reporter. Vol. 2, No. 1. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three column quarto newspaper devoted to agricultural topics.

Statistical Matter Relating to Principal Crops and Farm Animals, Transportation Rates, etc., in the United States—1899. Pp. 758–849. (Reprint from Yearbook of Department of Agriculture for 1899.)

Turkestan Alfalfa. By P. Beveridge Kennedy, Ph. D., Expert and Agent in Charge of Experimental Work. Pp. 20. (Circular No. 25, Division of Agrostology.)

Results of tests of Turkestan alfalfa, showing its value as a forage plant in different sections of the country, as compared with other varieties of alfalfa.

Rescue Grass. By Cornelius L. Shear, Assistant Agrostologist. Pp. 4, fig. 1. (Circular No. 26, Division of Agrostology.)

Description, history, cultivation, use, and feeding value of this pasture and hay grass.

Directions for the Use of Blackleg Vaccine. By Victor A. Nörsgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 8, figs. 3. (Circular No. 23, Bureau of Animal Industry.) Second revision.

Scales of Points for Judging Dairy Breeds of Cattle. Pp. 16, fig. 1. (Circular No. 27, Bureau of Animal Industry.) Revised edition.

Rabies in the District of Columbia. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 15. (Circular No. 30, Bureau of Animal Industry.)

A reply to published assertions that there is no such disease as rabies. Evidence is presented to show that hydrophobia does exist, and accounts of numbers of people being bitten by dogs suffering from that disease are given.

Agricultural Imports and Exports, 1895–1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 16. (Circular No. 22, Section of Foreign Markets.)

A statement of the value of the agricultural imports and exports of the United States during each fiscal year from 1895 to 1899, inclusive, as compared with the total imports and total domestic exports.

Monthly List of Publications, April, 1900. (No. 377, Division of Publications.)

Instructions for Determining in the Field the Salt Content of Alkali Waters and Soils. By Milton Whitney, Chief, Division of Soils. Pp. 9. (Circular No. 6, Division of Soils.)

#### REPRINTS.

Methods of Constructing Macadamized Roads. Pp. 12. (Circular No. 21, Office of Public Road Inquiry.)

State Aid to Road Building in Minnesota. By A. B. Choate. Pp. 12, figs. 5. (Circular No. 32, Office of Public Road Inquiry.)

#### FARMERS' BULLETINS.

Hop Culture in California. By Daniel Flint. Pp. 28, figs. 2. (Farmers' Bulletin No. 115.)

Directions and suggestions for growing, pruning, training, curing, and marketing hops in California.



Irrigation in Fruit Growing. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Experiment Station. Pp. 48, figs. 8. (Farmers' Bulletin No. 116.)

A statement of the relations of irrigation to fruit production, and of irrigation methods, as they have been demonstrated by Pacific coast experience.

Sheep, Hogs, and Horses in the Pacific Northwest. I. Sheep Husbandry, by James Withycombe, V. S., Vice Director of the Oregon Experiment Station; II. Hog Raising, by Hiram T. French, M. S., Agriculturist of the Idaho Experiment Station; III. The Horse Industry, by S. B. Nelson, D. V. M., Professor of Veterinary Science in the Washington Agricultural College. Pp. 28, figs. 2. (Farmers' Bulletin No. 117.)

Grape Growing in the South. By S. M. Tracy, M. S., Formerly Director of the Mississippi Agricultural Experiment Station. Pp. 32, figs. 6. (Farmers' Bulletin No. 118.)

Description of methods of growing grapes which have been found most satisfactory by Southern growers.

#### REPRINTS.

Important Insecticides: Directions for Their Preparation and Use. Pp. 32, figs. 3. (Farmers' Bulletin No. 19.) Fourth revised edition.

Meats: Composition and Cooking. By Chas. D. Woods, Office of Experiment Stations. Pp. 29, figs. 4. (Farmers' Bulletin No. 34.)

Methods of Curing Tobacco. By Milton Whitney, Chief of Division of Soils. Pp. 16. (Farmers' Bulletin No. 60.) Revised edition.

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Frost Fighting. Prepared under direction of Willis L. Moore, Chief U. S. Weather Bureau. By Alexander G. McAdie, Forecast Official. Pp. 15, figs. 9. (Bulletin No. 29, Weather Bureau.)

Monthly Weather Review. March, 1900. Vol. XXVIII, No. 3. Pp. 95-139, charts 10. Price 10 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 8, 9, 10, and 11 for May, 1900.)

Meteorological chart of the Great Lakes. May. (List of wind signal stations on the Lakes, both American and Canadian, with table of maximum of observed wind velocities and advices as to May storms and storm tracks.)

Also chart containing advices as to June storms and storm tracks.

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATION NOT AVAILABLE.

Letter from the Acting Secretary of Agriculture, presenting a detailed statement of the expenditures of all appropriations for the fiscal year ending June 30, 1899. Pp. 234. (House Doc. No. 173, 56th Cong., 1st sess.)

Approved:

JAMES WILSON,

*Secretary of Agriculture.*

GEO. WM. HILL,

*Editor and Chief.*

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381.

# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *June 30, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[June, 1900.]

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Yearbook of the U. S. Department of Agriculture, 1899. Pp. 880, frontispiece, pls. 63, figs. 33.

The first part, as usual, is devoted to the annual report of the Secretary of Agriculture.

The second part consists of 26 papers contributed by the various Bureaus, Divisions, and Offices of the Department. These papers are largely historical and give a comprehensive review of the progress and development of a century in most branches of scientific inquiry having a direct practical bearing upon agriculture. They portray the development of science in its application to agriculture in the United States during the nineteenth century.

The third part, or Appendix, has been enlarged and, in addition to the Department directory, directory of colleges and experiment stations, and lists of various agricultural and kindred associations, etc., contains much information of value to all persons interested in scientific and practical agriculture.

The regular edition is 500,000 copies, of which 470,000 are by law reserved for the exclusive use of Senators, Representatives, and Delegates in Congress, to whom miscellaneous applicants are referred. The small quota allotted to this Department is not sufficient to supply even its regular correspondents and coworkers.

The Superintendent of Documents has them for sale at 75 cents per copy.

A special edition of 5,000 copies in extra binding has been prepared for distribution abroad during the Paris Exposition.

Physiological Studies of Connecticut Leaf Tobacco. By Oscar Loew, of the Division of Vegetable Physiology and Pathology, detailed to the Division of Soils. Pp. 57. (Report No. 65.) Price 5 cents.

Sheep Scab: Its Nature and Treatment. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry, and Ch. Wardell Stiles, Ph. D., Zoologist of the Bureau. Pp. 64, pls. 6, figs. 36. (Bulletin No. 21, Bureau of Animal Industry.) Revised edition. Price 15 cents.

North American Fauna No. 17. Revision of American Voles of the Genus *Microtus*. By Vernon Bailey, Chief Field Naturalist. Prepared under the direction of Dr. C. Hart Merriam, Chief of Division of Biological Survey. Pp. 88, pls. 5, figs. 17. Price 10 cents.

Legislation for the Protection of Birds Other than Game Birds. By T. S. Palmer, Assistant Chief, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of Biological Survey. Pp. 94, pls. 2, figs. 8. (Bulletin No. 12, Division of Biological Survey.) Price 10 cents.

Contributions Toward a Monograph of the American Aleurodidæ. By A. L. Quaintance, M. S., Biologist and Agriculturist of the Georgia Agricultural Experiment Station, Experiment, Ga. The Red Spiders of the United States (*Tetranychus* and *Stigmæus*). By Nathan Banks, M. S., Assistant, Division of Entomology, U. S. Department of Agriculture. Prepared under the direction of the Entomologist. Pp. 79, pls. 8, figs. 16. (Bulletin No. 8, technical series, Division of Entomology.) Price 10 cents.

The Agricultural Experiment Stations in the United States. By A. C. True and V. A. Clark. The Paris Exposition, 1900. Prepared to Accompany the Experiment Station Exhibit. Contributed to by the Association of American Agricultural Colleges and Experiment Stations. Cloth. Pp. 636, frontispiece, pls. 153. (Bulletin No. 80, Office of Experiment Stations.) Price \$1.25.

A complete history of the agricultural experiment stations and a statement of their present status, including organization, equipment, financial support, lines of work, and methods of distributing information. The appendix contains extracts from laws and rulings affecting the stations, statistics, and lists of publications issued by the various stations.

At the convention of the Association of American Agricultural Colleges and Experiment Stations held at Minneapolis, Minn., July 13-15, 1897, it was decided that the association would undertake the preparation of a Collective Station Exhibit for the Paris Exposition provided the cooperation of the U. S. Department of Agriculture could be secured, and a committee was appointed to have charge of the exhibit. This committee decided that a part of this exhibit should consist of a report on the history and present status of the stations, and the Office of Experiment Stations was requested to prepare it. The work was, therefore, prepared by A. C. True, with the assistance of Mr. V. A. Clark and other members of the staff of the Office, and a small edition was printed for distribution at the Paris Exposition.

A limited number will be for sale by the Superintendent of Documents but none is available for distribution by the Department.

The Use of Water in Irrigation in Wyoming and its Relation to the Ownership and Distribution of the Natural Supply. By B. C. Buffum, M. S., Professor of Agriculture and Horticulture, University of Wyoming, and Vice-Director of Wyoming Agricultural Experiment Station. Pp. 56, pls. 8. (Bulletin No. 81, Office of Experiment Stations.) Price 10 cents.

Experiment Station Record, Vol. XI, No. 9. Pp. vi, 801-900. Price 10 cents.

Experiment Station Record. Vol. XI, No. 10. Pp. vi, 901-1,000. Price 10 cents.

The record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

Our Foreign Trade in Agricultural Products, 1890-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 62. (Bulletin No. 19, Section of Foreign Markets.) Price 5 cents.

Practical Tree Planting in Operation. By J. W. Toumey, Superintendent of Tree Planting. Pp. 27, pls. 4, figs. 2. (Bulletin No. 27, Division of Forestry.) Price 5 cents.



Stigmonose: A Disease of Carnations and Other Pinks. By Albert F. Woods, Assistant Chief, Division of Vegetable Physiology and Pathology. Pp. 30, pls. 3, figs. 5. (Bulletin No. 19, Division of Vegetable Physiology and Pathology.) Price 5 cents.

The Crop Reporter. Vol. 2, No. 2. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

Blackleg: Its Nature, Cause, and Prevention. By Victor A. Nörsgaard, Chief of Pathological Division. Pp. 22. (Circular No. 31, Bureau of Animal Industry.)

Wild Garlic. By Lyster H. Dewey, Assistant Botanist. Pp. 8, figs. 3. (Circular No. 9, Division of Botany.) Revised edition.

Canada Thistle. By Lyster H. Dewey, Assistant Botanist. Pp. 14, figs. 4. (Circular No. 27, Division of Botany.)

Agricultural Experiment Stations in the United States. By A. C. True, Director, Office of Experiment Stations. Pp. 8. (Circular No. 44, Office of Experiment Stations.)

Monthly List of Publications, May, 1900. (No. 380, Division of Publications.)

#### REPRINTS.

Notes Upon Dairying in California and The Export of California Butter to the Orient. By R. A. Pearson, M. S., Assistant Chief of Dairy Division. Prepared under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 29, pls. 4, fig. 1. (Bulletin No. 24, Bureau of Animal Industry.) Price 5 cents.

Third Report of Committee on Methods of Teaching Agriculture. By J. H. Connell, A. C. True, T. F. Hunt, H. T. French, and H. H. Wing, Committee. Pp. 7. (Circular No. 39, Office of Experiment Stations.)

The World's Markets for American Products. The German Empire. Pp. 91, pl. 1. (Bulletin No. 2, Section of Foreign Markets.) Price 5 cents.

The World's Markets for American Products. Belgium. Pp. 90. (Bulletin No. 6, Section of Foreign Markets.) Price 5 cents.

Trade of the Philippine Islands. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 160. (Bulletin No. 14, Section of Foreign Markets.) Price 10 cents.

Distribution of the Agricultural Exports of the United States, 1894-1898. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 153. (Bulletin No. 16, Section of Foreign Markets.) Price 10 cents.

Sources of the Agricultural Imports of the United States, 1894-1898. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 118. (Bulletin No. 17, Section of Foreign Markets.) Price 10 cents.

Our Trade with Japan, China, and Hongkong, 1889-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 168. (Bulletin No. 18, Section of Foreign Markets.) Price 10 cents.

Our Trade with Cuba from 1887 to 1897. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 30. (Circular No. 16, Section of Foreign Markets.)

Traffic of the Country Roads. Pp. 4. (Circular No. 19, Office of Road Inquiry.)

## FARMERS' BULLETINS.

## REPRINTS.

- Silos and Silage. Charles S. Plumb, B. S., Professor of Animal Industry and Dairying in Purdue University and Director of the Indiana Agricultural Experiment Station. Pp. 32, figs. 10. (Farmers' Bulletin No. 32.)
- Insects Affecting the Cotton Plant. By L. O. Howard, Ph. D., Entomologist. (Reprinted with revision by the author, from Bulletin 33, Office of Experiment Stations.) Pp. 32, figs. 18. (Farmers' Bulletin No. 47.)
- Asparagus Culture. By R. B. Handy, Division of Publications. Pp. 40, figs. 17. (Farmers' Bulletin No. 61.)
- Some Essentials in Beef Production. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 24, figs. 17. (Farmers' Bulletin No. 71.)
- Cattle Ranges of the Southwest: A History of the Exhaustion of the Pasturage and Suggestions for its Restoration. By H. L. Bentley, Special Agent in charge of Grass Station at Abilene, Tex. Pp. 32, figs. 9. (Farmers' Bulletin No. 72.)
- The Liming of Soils. By H. J. Wheeler, Ph. D., Chemist of the Rhode Island Agricultural Experiment Station. Pp. 20. (Farmers' Bulletin No. 77.) Revised edition.
- Three Insect Enemies of Shade Trees. By L. O. Howard, Entomologist. (Reprinted, with some annotations by the author, from the Yearbook of the Department of Agriculture for 1895.) Pp. 30, figs. 11. (Farmers' Bulletin No. 99.)
- Experiment Station Work—XIII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 3. (Farmers' Bulletin No. 107.)

## PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

- Report of the Chief of the Weather Bureau, 1898-99. By Willis L. Moore. (In two volumes.) Vol. I. Pp. 247.
- Monthly Weather Review. April, 1900. Vol. XXVIII, No. 4. Pp. 141-191, charts 9. Price 10 cents.
- Anemometer Tests. By C. F. Marvin, Professor of Meteorology. Prepared under direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 18, figs. 7. (W. B. No. 223.)
- Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 12, 13, 14, and 15 for June, 1900.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

## PUBLICATION NOT AVAILABLE.

- Adaptation of Methods of Cultivation and Manuring to the Physical Properties of Soils. By Ewald Wollny, Ph. D., Professor in the Technical High School at Munich. Pp. 805-810. (Reprinted from Experiment Station Record, Vol. XI, No. 9.)

Approved:

JAMES WILSON,  
*Secretary of Agriculture.*

GEO. WM. HILL,  
*Editor and Chief.*



This circular will be sent regularly to all who apply for it.

No. 385.

# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *July 31, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[July, 1900.]

**NOTE.**—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Fodder and Forage Plants Exclusive of the Grasses. By Jared G. Smith, Assistant, Section of Seed and Plant Introduction. Prepared under the direction of F. Lamson-Scribner, Agrostologist. Pp. 86, pls. 2, figs. 46. (Bulletin No. 2, Division of Agrostology.) Revised edition. Price 5 cents.

American Grasses—I. (Illustrated.) Descriptions of the Species, by F. Lamson-Scribner, Agrostologist. Pp. 319, figs. 302. (Bulletin No. 7, Division of Agrostology.) Third edition. Price 30 cents.

Studies on American Grasses. A Revision of the North American Species of *Bromus* Occurring North of Mexico. By Cornelius L. Shear, Assistant Agrostologist. Prepared under the direction of F. Lamson-Scribner, Agrostologist. Pp. 66, figs. 40. (Bulletin No. 23, Division of Agrostology.) Price 5 cents.

Contributions from the U. S. National Herbarium. Vol. V, No. 5. The Plant Covering of Ocracoke Island; A Study in the Ecology of the North Carolina Strand Vegetation. By Thomas H. Kearney, Jr. Pp. 63, figs. 18. Price 5 cents.

Peach Leaf Curl: Its Nature and Treatment. By Newton B. Pierce, In charge of Pacific Coast Laboratory, Santa Ana, California. Pp. 204, pls. 30, figs. 10. (Bulletin No. 20, Division of Vegetable Physiology and Pathology.) Price 20 cents.

Results of investigations of peach leaf curl, and of experiments conducted for a number of years for the prevention of that disease. An extra edition of this bulletin was ordered by Congress for distribution by Senators, Representatives, and Delegates. The Department's quota will be exhausted in supplying peach growers throughout the country, whose names are on file at the Department, and miscellaneous applicants are referred to their Senators, Representatives, or Delegates for copies of this publication.

Directory of State Officials and Organizations Concerned with the Protection of Birds and Game. Pp. 8. (Circular No. 28, Division of Biological Survey.)

Protection and Importation of Birds Under Act of Congress Approved May 25, 1900. Pp. 6. (Biological Survey Circular No. 29.)

Explanation of the Lacey Act and rules and regulations for the importation of birds and animals.

Crimson Clover Seed. By A. J. Pieters, In charge of Pure Seed Investigations. Pp. 6, figs. 3. (Circular No. 18, Division of Botany.) Revised edition.

Composition Chimique Du Maïs et de Ses Produits. Par M. H. Wiley. (Traduit librement de l'anglais, par M. Edmond Gain, maître de conférences à la Faculté des Sciences de l'Université de Nancy.) Pp. 13. (Circular No. 6, Division of Chemistry.)

A French abstract of Bulletin No. 50 of the Division of Chemistry (composition of maize, etc.) translated by M. Edmond Gain and published in *Annales Agronomiques*, 1889.

Monthly List of Publications, June, 1900. Pp. 4. (No. 381, Division of Publications.)

Road Improvement in New York. Pp. 15. (Circular No. 35, Office of Public Road Inquiries.)

The Higbie-Armstrong law for the improvement of the public highways of New York, and an explanation of its workings by Mr. Armstrong.

Description of a Soil Map of the Connecticut Valley. Pp. 4. (Circular No. 7, Division of Soils.)

Describes briefly the conditions in the Connecticut Valley and the soils represented on a map which accompanies Report No. 64, entitled *Field Operations of the Division of Soils*, 1899, and of which a small edition has been issued in separate form.

The Crop Reporter. Vol. 2, No. 3. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three-column quarto newspaper devoted to agricultural topics.

#### REPRINTS.

Legislation for the Protection of Birds Other than Game Birds. By T. S. Palmer, Assistant Chief, Biological Survey. Prepared under the Direction of Dr. C. Hart Merriam, Chief of Biological Survey. Pp. 94, pls. 2, figs. 8. (Bulletin No. 12, Division of Biological Survey.) Price 10 cents.

Horse-Radish Culture in Bohemia. By David G. Fairchild, Agricultural Explorer. Pp. 3, figs. 2. (Circular No. 20, Division of Botany.)

Rapport sur l'usage et les Possibilités de l'Extension du Maïs (Blé d'Inde) en Europe. 1. Importance du Maïs comme aliment par le Dr. H. W. Wiley, Directeur du Laboratoire de Chimie, et 2. Industrie du Blé d'Inde aux Etats-Unis par B. W. Snow, Statisticien adjoint. Pp. 22.

Land-Grant and Other Colleges and the National Defense. By Charles W. Dabney, Ph. D., President of the University of Tennessee. Pp. 15. (Circular No. 40, Office of Experiment Stations.)

Food—Nutrients—Food Economy. Pp. 6. (Circular No. 43, Office of Experiment Stations.)

Southern Pine—Mechanical and Physical Properties. By B. E. Fernow, Chief, Division of Forestry. Pp. 12, diags. 4. (Circular No. 12, Division of Forestry.)



The Cause and Prevention of Pear Blight. By M. B. Waite, Assistant, Division of Vegetable Physiology and Pathology, U. S. Department of Agriculture. Pp. 295-300. (Reprinted from the Yearbook of the U. S. Department of Agriculture for 1895.)

REPRINTS FROM YEARBOOK OF DEPARTMENT OF AGRICULTURE  
FOR 1899.

Some Examples of the Development of Knowledge Concerning Animal Diseases. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. iii, 93-134.

Agricultural Education in the United States. By A. C. True, Ph. D., Director of the Office of Experiment Stations. Pp. iii, 157-190.

Progress of Agriculture in the United States. By George K. Holmes, Assistant Statistician. Pp. iii, 307-334.

Soil Investigations in the United States. By Milton Whitney, Chief of Division of Soils. Pp. iii, 335-346.

Progress of Road Building in the United States. By Maurice O. Eldridge, Acting Director of the Office of Public Road Inquiries. Pp. ii, 367-380.

Dairy Development in the United States. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. Pp. v, 381-402, pls. 8, figs. 12.

Development of the Nutrition Investigations of the Department of Agriculture. By A. C. True, Ph. D., Director, and R. D. Milner, Ph. B., Assistant in Nutrition Investigations, Office of Experiment Stations. Pp. iii, 403-414.

Administrative Work of the Federal Government in Relation to the Animal Industry. By George F. Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. iii, 441-464.

FARMERS' BULLETINS.

REPRINTS.

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)

Fowls: Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)

Marketing Farm Produce. By George G. Hill, formerly Manager and Editor of The American Farmer, Illinois. Pp. 28, figs. 7. (Farmers' Bulletin No. 62.)

Forestry for Farmers. By B. E. Fernow, Chief of Division of Forestry. (Reprinted from the Yearbooks of the U. S. Department of Agriculture for 1894 and 1895.) Pp. 48, figs. 15. (Farmers' Bulletin No. 67.)

Good Roads for Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)

The Farmer's Interest in Good Seed. By A. J. Pieters, In charge of Pure Seed Investigations, Division of Botany. Pp. 24, figs. 7. (Farmers' Bulletin No. 111.)

The Apple and How to Grow It. By G. B. Brackett, Pomologist. Pp. 32, figs. 10. (Farmers' Bulletin No. 113.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Report of the Chief of the Weather Bureau, 1898-99. Part II. Climatology. Hourly Averages of Atmospheric Pressure, Temperature, and Wind from the Records of Automatic Instruments at Twenty-eight Stations. Pp. 15-69.

Report of the Chief of the Weather Bureau, 1898-99. Part III. Climatology. Monthly and Annual Meteorological Summaries. Pp. 71-153.

Report of the Chief of the Weather Bureau, 1898-99. Part IV. Climatology. Monthly Annual Mean Temperature and Annual Extremes of Temperature, Together with the Dates of First and Last Killing Frost. Pp. 155-190.

Report of the Chief of the Weather Bureau, 1898-99. Part V. Climatology. Monthly and Annual Precipitation, 1898. All stations. Pp. 191-247.

Monthly Weather Review. May, 1900. Vol. XXVIII, No. 5. Pp. 193-238; charts 8. Price 10 cents.

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 16, 17, 18, 19, and 20 for July, 1900.)

Meteorological Chart of the Great Lakes. (Contains data concerning fogs, Lake levels, and wind phenomena, July storms and storm tracks, storm and wind signals, etc.) Also one showing August storms and storm tracks.

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

Work of the Breeder in Improving Live Stock. By John Clay, jr., Chicago, Ill. Pp. ii, 627-642. (Reprint from Yearbook of Department of Agriculture for 1899.)

Development of Transportation in the United States. By Angus Sinclair, Editor Locomotive Engineering. Pp. ii, 643-663. (Reprint from Yearbook of Department of Agriculture for 1899.)

JOS. A. ARNOLD,

*Acting Chief.*

Approved:

WILLIS L. MOORE,

*Acting Secretary of Agriculture.*



This circular will be sent regularly to all who apply for it.

No 387.

United States Department of Agriculture,  
DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *August 31, 1900.*

**MONTHLY LIST OF PUBLICATIONS.**

[August, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Field Operations of the Division of Soils, 1899. By Milton Whitney, Chief of Division of Soils, with Accompanying Papers by Thomas H. Means, Frank D. Gardner, Clarence W. Dorsey, Frank K. Cameron, and Lyman J. Briggs. Pp. 198, pls. 29, figs. 19, maps 11, in case. Cloth. (Report No. 64.) Congressional publication.

A report of extensive field operations, consisting of soil surveys of an area of not less than 720,000 acres, scattered throughout New Mexico, Utah, Colorado, and Connecticut. These accounts of soil surveys are followed by discussions on "The application of the theory of solutions to the study of soils," "Some necessary modifications in methods of analysis as applied to alkali soils," and "Salts as influencing the rate of evaporation of water from soils." This report was printed by act of Congress. The quota of the Department will be exhausted in supplying the regular exchange and mailing lists and the very large number of persons who aided and cooperated with the Division of Soils in its work. Miscellaneous applicants are, therefore, referred to their Senators, Representatives, and Delegates for copies of this publication.

Report on the Big Trees of California. Prepared in the Division of Forestry, U. S. Department of Agriculture. Pp. 30, pls. 15, map. (Senate Doc. No. 393, 56th Cong., 1st sess.)

Notes on the Mosquitoes of the United States: Giving Some Account of Their Structure and Biology, with Remarks on Remedies. By L. O. Howard, Ph. D., Entomologist. Pp. 70, figs. 22. (Bulletin No. 25, new series, Division of Entomology.) Price 5 cents.

A Report on the Work and Expenditures of the Agricultural Experiment Stations for the Year Ended June 30, 1899. By A. C. True, Director of the Office of Experiment Stations. Pp. 111. (Bulletin No. 83, Office of Experiment Stations.) Price 10 cents.

Accessions to the Department Library. April–June, 1900. Pp. 23. (Library Bulletin No. 32.) Price 5 cents.

The Crop Reporter. Vol. 2, No. 4. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three-column quarto newspaper devoted to agricultural topics.

Rubber Cultivation for Porto Rico. By O. F. Cook, Special Agent. Pp. 12. (Circular No. 28, Division of Botany.)

Treats of the botanical sources of rubber, rubber culture as an element in mixed farming, experimental plantings of rubber trees, harvesting of rubber, coagulation of rubber, and the future of rubber culture.

Monthly List of Publications, July, 1900. Pp. 4. (No. 385, Division of Publications.)

Changes in Railroad Freight Classifications. By Edward G. Ward, jr., of the Division of Statistics. Pp. 43. (Circular No. 12, Division of Statistics.)

## REPRINTS.

Contributions from The U. S. National Herbarium. Vol. V, No. 5. The Plant Covering of Ocracoke Island; A Study in the Ecology of the North Carolina Strand Vegetation. By Thomas H. Kearney, jr. Pp. iv, 261-319, figs. 18. Price 5 cents.

The Present Status of Rice Culture in the United States. By S. A. Knapp. Pp. 56, pls. 3. (Bulletin No. 22, Division of Botany.) Price 10 cents.

Proceedings of the Thirteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations Held at San Francisco, Cal., July 5-7, 1899. Edited by A. C. True and W. H. Beal, for the Office of Experiment Stations, and H. H. Goodell for the Executive Committee of the Association. Pp. 112. (Bulletin No. 76, Office of Experiment Stations.) Price 10 cents.

Directory of State Officials and Organizations Concerned with the Protection of Birds and Game. Pp. 8. (Circular No. 28, Division of Biological Survey.)

Mineral Phosphates as Fertilizers. By H. W. Wiley, Chemist of the U. S. Department of Agriculture. (Reprinted from the Yearbook of the U. S. Department of Agriculture for 1894.) Pp. iii, 177-192, figs. 2.

Grasses as Sand and Soil Binders. By F. Lamson-Scribner, B. Sc., Agrostologist. Pp. iii, 421-436, figs. 11. (Reprinted from the Yearbook of the U. S. Department of Agriculture for 1894.)

A Soil Survey in Salt Lake Valley, Utah. By Frank D. Gardner and John Stewart. Pp. 77-114, pls. 11, figs. 5, maps 4. (Reprinted from Report No. 64. Field Operations of the Division of Soils, 1899.)

REPRINTED FROM YEARBOOK OF DEPARTMENT OF AGRICULTURE  
FOR 1899.

Work of the Meteorologist for the Benefit of Agriculture, Commerce, and Navigation. By F. H. Bigelow, Professor of Meteorology, Weather Bureau. Pp. ii, 71-92, pls. 2.

Progress in Economic Entomology in the United States. By L. O. Howard, Ph. D., Entomologist. Pp. ii, 135-156, pl. 1.

Progress in the Treatment of Plant Diseases in the United States. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. iii, 191-199.

The Relation of Chemistry to the Progress of Agriculture. By Dr. H. W. Wiley, Chemist. Pp. iv, 201-258, pls. 2.

A Review of Economic Ornithology in the United States. By T. S. Palmer, Assistant Chief of Biological Survey. Pp. iii, 259-292, pls. 3, fig. 1.

Progress of Forestry in the United States. By Gifford Pinchot, Forester. Pp. ii, 293-306, pls. 4, fig. 1.



Progress of Economic and Scientific Agrostology. By F. Lamson-Scribner, B. Sc., Agrostologist. Pp. iii, 347-366, figs. 5.

The Practice of Forestry by Private Owners. By Henry S. Graves, Superintendent of Working Plans of the Division of Forestry. Pp. ii, 415-428, pls. 4.

Growth of the Tobacco Industry. By Milton Whitney, Chief, and Marcus L. Floyd, Tobacco Expert, Division of Soils. Pp. iii, 429-440, pls. 7.

Progress of Plant Breeding in the United States. By Herbert J. Webber and Ernst A. Bessey, Division of Vegetable Physiology and Pathology. Pp. iii, 465-490, pls. 3, figs. 2.

Development of Agricultural Libraries. By Charles H. Greathouse, M. A., Editorial Clerk, Division of Publications. Pp. v, 491-512, pls. 4, fig. 1.

Agricultural Experiment Stations in the United States. By A. C. True, Ph. D., Director of the Office of Experiment Stations. Pp. iii, 513-548, pls. 3.

Seed Selling, Seed Growing, and Seed Testing. By A. J. Pieters, In Charge of Pure Seed Investigations, Division of Botany. Pp. iii, 549-574, pls. 5, fig. 1.

Progress of Commercial Growing of Plants Under Glass. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. iii, 575-590, pls. 3, figs. 6.

Rise and Future of Irrigation in the United States. By Elwood Mead, Expert in Charge of Irrigation Investigations, Office of Experiment Stations. Pp. iii, 591-612, pls. 5.

Succulent Forage for the Farm and Dairy. By Thomas A. Williams, Assistant Agrostologist. Pp. ii, 613-626, pls. 2.

A Directory for Farmers. Pp. 686-720.

#### FARMERS' BULLETINS.

Experiment Station Work—XV. Pp. 31, figs. 5. (Farmers' Bulletin No. 119.)

CONTENTS: Storing apples without ice—Cold storage on the farm.—Mechanical cold storage for fruit—Keeping qualities of apples—Improvement of blueberries—Transplanting muskmelons—Banana flour—Fresh and canned tomatoes—Purslane—Mutton sheep—Effect of cotton-seed meal on the quality of butter—Grain feed of milch cows—Protection against Texas fever.

The Principal Insects Affecting the Tobacco Plant. By L. O. Howard, Entomologist. (Reprinted with slight revision by the author from the Yearbook of the Department of Agriculture for 1898.) Pp. 32, figs. 25. (Farmers' Bulletin No. 120.)

Descriptions of various insects which attack the tobacco plant, other insects that injure dried tobacco and remedies against them.

#### REPRINTS.

The Feeding of Farm Animals. By E. W. Allen, Ph D., Assistant Director of the Office of Experiment Stations. (Revised.) Pp. 32. (Farmers' Bulletin No. 22.)

Fowls: Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)

**Facts About Milk.** By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29, figs. 8. (Farmers' Bulletin No. 42.)

**The Dairy Herd: Its Formation and Management.** By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted, with revision by the author, from the Yearbook of the U. S. Department of Agriculture for 1894.) Pp. 24. (Farmers' Bulletin No. 55.)

**Ducks and Geese: Standard Breeds and Management.** By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)

**Experiment Station Work—II.** Pp. 32, figs. 7. (Farmers' Bulletin No. 65.)

**Corn Culture in the South.** By S. M. Tracy, M. S. Pp. 24. (Farmers' Bulletin No. 81.)

**Fish as Food.** By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 85.)

**Breeds of Dairy Cattle.** By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted from the Report of the Bureau of Animal Industry for 1898.) Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)

**The Apple and How to Grow It.** By G. B. Brackett, Pomologist. Pp. 32, figs. 10. (Farmers' Bulletin No. 113.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

**Tables of Daily and Monthly Precipitation.** Pp. 256.

**Monthly Weather Review.** June, 1900. Vol. XXVIII, No. 6. 239-278, charts 8. Price 10 cents.

**Charts of the Weather Bureau—**

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 21, 22, 23, and 24 for August, 1900.)

Meteorological Chart of the Great Lakes. (Contains data concerning fogs, September storms and storm tracks, storm and wind signals, etc.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

**Application of the Theory of Solution to the Study of Soils.** By Frank K. Cameron. (Reprint from Report No. 64 of the Department of Agriculture. Field Operations of the Division of Soils in 1899.) Pp. iii, 141-172.

**Some Necessary Modifications in Methods of Mechanical Analysis as Applied to Alkali Soils.** By Lyman J. Briggs. (Reprint from Report No. 64 of the Department of Agriculture. Field Operations of the Division of Soils in 1899.) Pp. iii, 173-183, pl. 1, fig. 1.

**Salts as Influencing the Rate of Evaporation of Water from Soils.** By Lyman J. Briggs. (Reprint from Report No. 64 of the Department of Agriculture. Field Operations of the Division of Soils in 1899.) Pp. iii, 184-198, pl. 1, figs. 8.

GEO. WM. HILL,  
*Editor and Chief.*

Approved:

JAMES WILSON,  
*Secretary of Agriculture.*



This circular will be sent regularly to all who apply for it.

No. 389.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *September 29, 1900.*

## MONTHLY LIST OF PUBLICATIONS.

[September, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

**Sheep and Wool: A Review of the Progress of American Sheep Husbandry.** By J. R. Dodge, Special Agent. Pp. 63, figs. 3. Report No. 66. Price 5 cents.

Contains a brief history of wool growing in colonial times, introduction of the Merino, breeding tendencies in wool growing and their effects, increase of mutton sheep, domestic wool supply, classification and handling of American wools, course of prices, periods of decline and revival, tariff changes and their effects, and the present condition of sheep husbandry.

**Progress of the Beet-Sugar Industry in the United States in 1899, with a Supplementary Report on the Cane-Sugar Industry of the Hawaiian Islands.** By Charles F. Saylor, Special Agent, and H. W. Wiley, Chemist, U. S. Department of Agriculture. Pp. 200, pls. 4, fig. 1. (House Doc. No. 699, 56th Cong., 1st Sess.)

**Rabies.** Report of the Committee on Public Health of the Medical Society of the District of Columbia. Pp. 29. (Bulletin No. 25, Bureau of Animal Industry.) Price 5 cents.

**Food of the Bobolink, Blackbirds, and Grackles.** By F. E. L. Beal, B. S., Assistant Biologist. Prepared under the direction of Dr. C. Hart Merriam, Chief of Biological Survey. Pp. 77, pl. 1, figs. 6. (Bulletin No. 13, Division of Biological Survey.) Price 5 cents.

**North American Fauna No. 18.** Revision of the Pocket Mice of the Genus *Perognathus*. By Wilfred H. Osgood, Assistant Biologist, Biological Survey. Prepared Under the Direction of Dr. C. Hart Merriam, Chief of Division of Biological Survey. Pp. 72, pls. 4, figs 15. Price 10 cents.

**A List of Works on North American Entomology.** Compiled Under the Direction of the Entomologist, for the use of Students and other Workers, as well as for those about to begin the collecting and study of Insects. By Nathan Banks, Assistant. Pp. 95. (Bulletin No. 24, New Series, Division of Entomology.) Price 10 cents.

**Report on Agricultural Investigations in Alaska in 1899.** By C. C. Georgeson, M. S., Special Agent in Charge of Alaska Investigations. Pp. 55, pls. 17. (Bulletin No. 82, Office of Experiment Stations.) Price 10 cents.

**Nutrition Investigations at the California Agricultural Experiment Station, 1896-1898.** By M. E. Jaffa, M. S., Assistant Professor of Agriculture, University of California. Pp. 39. (Bulletin No. 84, Office of Experiment Stations.) Price 5 cents.

A Report of Investigations on the Digestibility and Nutritive Value of Bread. By Chas D. Woods, Director, and L. H. Merrill, Chemist, Maine Agricultural Experiment Station. Pp. 51. (Bulletin No. 85, Office of Experiment Stations.) Price 5 cents.

Experiment Station Record, Vol. XI, No. 11. Pp. vii, 1,001-1,100. Price 10 cents.

Experiment Station Record, Vol. XII, No. 1. Pp. vi, 1-100. Price 10 cents.

Experiment Station Record, Vol. XII, No. 2. Pp. vi, 2-101-200, figs. 3. Price 10 cents.

The record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

Agricultural Exports of the United States by Countries, 1895-1899.

By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 88. (Bulletin No. 20, Section of Foreign Markets.) Price 10 cents.

Two Diseases of Red Cedar, Caused by Polyporus Juniperinus N. Sp. and Polyporus Carneus Nees. A Preliminary Report. By Hermann von Schrenk, Instructor in Botany, Henry Shaw School of Botany, Special Agent, Division of Vegetable Physiology and Pathology. Pp. 22, pls. 7, figs. 3. (Bulletin No. 21, Division of Vegetable Physiology and Pathology.) Price 10 cents.

Xenia, or the Immediate Effect of Pollen, in Maize. By Herbert J. Webber, In Charge of Plant-Breeding Laboratory. Pp. 44, pls. 4. (Bulletin No. 22, Division of Vegetable Physiology and Pathology.) Price 10 cents.

This is a technical paper, but the subject discussed has a broad, practical application in work on plant breeding now under way.

Wild Animals and Birds which May be Imported without Permits. Pp. 1. (Biological Survey Circular No. 30.)

Regulations of Foreign Governments Regarding Importation of American Plants, Trees, and Fruits. By L. O. Howard, Entomologist. Pp. 4. (Circular No. 41, second series, Division of Entomology.)

Monthly List of Publications, August, 1900. Pp. 4. (No. 387, Division of Publications.)

Publications of the U. S. Department of Agriculture for sale by the Superintendent of Documents, Union Building, Washington, D. C. Corrected to July 1, 1900. Pp. 36. (No. 179, 7th edition.)

The Crop Reporter. Supplement to Volume 2, No. 4. Pp. 4.

Foreign crops. Their condition at or near harvest time—outlook as to quality and yield in various countries.

The Crop Reporter. Vol. 2, No. 5. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

#### REPRINTS.

Proceedings of the Sixteenth Annual Convention of the Association of Official Agricultural Chemists, Held at San Francisco, Cal., July 5, 6, and 7, 1899. Edited by Harvey W. Wiley, Secretary of the Association. Pp. 130, figs. 2. (Bulletin No. 57, Division of Chemistry.) Price 10 cents.



- Notes on the Mosquitoes of the United States: Giving Some Account of Their Structure and Biology, with Remarks on Remedies. By L. O. Howard, Ph. D., Entomologist. Pp. 70, figs. 22. (Bulletin No. 25, new series, Division of Entomology.) Price 5 cents.
- Turkestan Alfalfa. By P. Beveridge Kennedy, Ph. D., Expert and Agent in Charge of Experimental Work. Pp. 20. (Circular No. 25, Division of Agrostology.)
- Directions for the Use of Blackleg Vaccine. By Victor A. Nörsgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 8, figs. 3. (Circular No. 23, Bureau of Animal Industry.) Second revision.
- Protection and Importation of Birds Under Act of Congress Approved May 25, 1900. Pp. 6. (Biological Survey Circular No. 29.)
- Mosquitoes and Fleas. By L. O. Howard, Entomologist. Pp. 4. (Circular No. 13, second series, Division of Entomology.)
- The Larger Corn Stalk-Borer. (*Diatræa saccharalis* Fab.) By L. O. Howard, Entomologist. Pp. 3, figs. 3. (Circular No. 16, second series, Division of Entomology.)
- Hawks and Owls from the Standpoint of the Farmer. By A. K. Fisher, M. D., Assistant Ornithologist, U. S. Department of Agriculture. Pp. iii, 215-233, pls. 3, figs. 4. (Reprinted from the Yearbook of the U. S. Department of Agriculture for 1894.)
- Utilizing Surplus Fruits. By G. B. Brackett, Pomologist. Pp. ii, 309-316. (Reprint from Yearbook of Department of Agriculture for 1898.)
- The Present Condition of Grape Culture in California. By George Husman, of Napa, Cal. Pp. ii, 551-562. (Reprint from Yearbook of Department of Agriculture 1898.)
- The Movement and Retention of Water in Soils. By Lyman J. Briggs, Assistant Chief of Division of Soils. Pp. ii, 399, 404, figs. 8. (Reprint from Yearbook of Department of Agriculture for 1898.)
- The Soluble Mineral Matter of Soils. By Thomas H. Means, Assistant, Division of Soils. Pp. ii, 495-504. (Reprint from Yearbook of Department of Agriculture for 1898.)
- Soil Survey in the Connecticut Valley. By Clarence W. Dorsey and J. A. Bonsteel. Pp. iii, 125-140, pls. 7, map. (Reprint from Report No. 64 of the Department of Agriculture. Field Operations of the Division of Soils in 1899.)

#### FARMERS' BULLETINS.

##### REPRINTS.

- Peach Yellows and Peach Rosette. By Erwin F. Smith, Special Agent, Under the Direction of B. T. Galloway, Chief of the Division of Vegetable Pathology. Pp. 20, figs. 7. (Farmers' Bulletin No. 17.)
- Barnyard Manure. By W. H. Beal, of the Office of Experiment Stations. Pp. 32, figs. 7. (Farmers Bulletin No. 21.)
- Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)
- Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)

- Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under Supervision of the Dairy Division, Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 57.)
- Good Roads for Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)
- Raising Sheep for Mutton. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 48, figs. 18. (Farmers' Bulletin No. 96.)
- Southern Forage Plants. Compiled from the publications of the Division of Agrostology by F. Lamson-Scribner, Agrostologist. Pp. 48, figs. 14. (Farmers' Bulletin No. 102.)
- Farmers' Reading Courses. (Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey.) Pp. 20. (Farmers' Bulletin No. 109.)
- Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared Under the Supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 39, figs. 3. (Farmers' Bulletin No. 112.)
- Sheep, Hogs, and Horses in the Pacific Northwest. I. Sheep Husbandry, by James Withycombe, V. S., Vice Director of the Oregon Experiment Station; II. Hog Raising, by Hiram T. French, M. S., Agriculturist of the Idaho Experiment Station; III. The Horse Industry, by S. B. Nelson, D. V. M., Professor of Veterinary Science in the Washington Agricultural College. Pp. 28, figs. 2. (Farmers' Bulletin No. 117.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Atmospheric Radiation: A Research Conducted at the Allegheny Observatory and at Providence, R. I. Submitted to Willis L. Moore, Chief U. S. Weather Bureau, by Frank W. Very. Pp. 134. (Bulletin G, U. S. Weather Bureau.)

Monthly Weather Review. July, 1900. Vol. XXVIII, No. 7. Pp. 279-320, pls. 3, charts 8. Price 10 cents.

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 25, 26, 27, and 28 for September, 1900.)

Climatic Charts of the United States. In six parts. I. Washington Daily Weather Maps. II. Normal Precipitation. III. Normal Sunshine. IV. Normal Barometric Pressure. V. Normal Temperature of the Air at the Surface of the Earth. VI. Temperature. (These Charts are for the exclusive use of Weather Bureau Stations, and not for general distribution.)

(West Indian Hurricane of September 1-10, 1900. Storm Bulletin No. 1.)

Meteorological Chart of the Great Lakes. (Contains data concerning fogs, Lake storms, storm and wind signals, etc.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

GEO. WM. HILL,  
*Editor and Chief.*

Approved:

JAMES WILSON,

*Secretary of Agriculture.*



This circular will be sent regularly to all who apply for it.

No. 394.

# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *October 31, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[October, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute or control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

North American Fauna No. 19. Results of a Biological Reconnoissance of the Yukon River Region. General Account of the Region. Annotated List of Mammals. By Wilfred H. Osgood. Annotated List of Birds. By Louis B. Bishop, M. D. Prepared under the direction of Dr. C. Hart Merriam, Chief of Division of Biological Survey. Pp. 100, pls. 7. Price 10 cents.

Proceedings of the Twelfth Annual Meeting of the Association of Economic Entomologists. Pp. 102, pls. 2. (Bulletin No. 26, new series, Division of Entomology.) Price 10 cents.

Irrigation in New Jersey. By Edward B. Voorhees, M. A., Director New Jersey Agricultural Experiment Stations and Professor of Agriculture Rutgers College. Pp. 40, figs. 5. (Bulletin No. 87, Office of Experiment Stations.) Price 5 cents.

Results of experiments conducted for the purpose of determining whether irrigation during short periods of drought in regions where the rainfall is usually sufficient for the maximum growth of crops will sufficiently increase the yield to pay for the works necessary to obtain the supply of water.

Agricultural Imports of the United States, by Countries, 1895-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 74. (Bulletin No. 21, Section of Foreign Markets.) Price 5 cents.

Statistical tables showing the value and character of our agricultural imports from each of the various foreign countries during the five years, 1895-1899.

A Short Account of the Big Trees of California. Prepared in the Division of Forestry. Pp. 30, pls. 17. (Bulletin No. 28, Division of Forestry.) Price 15 cents.

Index to Literature Relating to Animal Industry in the Publications of the Department of Agriculture, 1837 to 1898. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 676. (Bulletin No. 5, Division of Publications.) Price 35 cents.

Information Concerning Game: Seasons, Shipment, and Sale. By T. S. Palmer and H. W. Olds, Assistants, Biological Survey. Pp. 20. (Circular No. 31, Biological Survey.)

Information concerning the trade in game, including tables showing close seasons and species prohibited from sale and shipment.

Broom Corn. (*Andropogon sorghum vulgaris*.) By A. C. True, Director. Pp. 4. (Circular No. 28, Office of Experiment Stations.) Revised edition.

Monthly List of Publications, September, 1900. Pp. 4. (No. 389, Division of Publications.)

List of Free Employment Agencies for the Use of Farmers. Pp. 42. (Circular No. 13, Division of Statistics.)

A list of free employment agencies, and other institutions and individuals willing to act as such, which are likely to be able to supply farm laborers, domestic servants, or other employees for permanent or temporary employment in the country.

The Crop Reporter. Vol. 2, No. 6. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three-column quarto newspaper devoted to agricultural topics.

#### REPRINTS.

The White Pine (*Pinus strobus* Linnæus). By V. M. Spalding, Professor of Botany in the University of Michigan. Revised and enlarged by B. E. Fernow, Chief of the Division of Forestry. With contributions: Insect Enemies of the White Pine, by F. H. Chittenden, Division of Entomology. The Wood of the White Pine, by Filibert Roth, Division of Forestry. Pp. 185, frontispiece, pls. 13, figs. 40. Quarto. (Bulletin No. 22, Division of Forestry.) Price 40 cents.

A Primer of Forestry, Part I: The Forest. By Gifford Pinchot, Forester. Pp. 88, frontispiece, pls. 47, figs. 83. (Bulletin No. 24, Division of Forestry.) Congressional edition. Price 35 cents.

Crimson Clover Seed. By A. J. Pieters, In Charge of Pure Seed Investigations. Pp. 7, figs. 3. (Circular No. 18, Division of Botany.) Revised edition.

Pruning and Training of Grapes. By E. G. Lodeman, Late Assistant Horticulturist, Cornell (N. Y.) Experiment Station. Pp. iv, 499-539. (Reprinted from the Yearbook of the Department of Agriculture for 1896.)

Steel-Track Wagon Roads. By Martin Dodge, Director of the Office of Road Inquiry. Pp. ii, 291-296, pls. 3, fig. 1. (Reprint from Yearbook of Department of Agriculture for 1898.)

Construction of Good Country Roads. By Maurice O. Eldridge, Assistant in Office of Road Inquiry. Pp. ii, 317-324, pls. 2. (Reprint from Yearbook of Department of Agriculture for 1898.)

#### FARMERS' BULLETINS.

##### REPRINTS.

Leguminous Plants for Green Manuring and for Feeding. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 16.)

Sweet Potatoes: Culture and Uses. By J. F. Duggar, M. S., Professor of Agriculture, Agricultural and Mechanical College of Alabama. Pp. 32, figs. 4. (Farmers' Bulletin No. 26.) Revised edition.



Weeds: And How to Kill Them. By Lyster H. Dewey, Assistant Botanist. Pp. 32, figs. 11. (Farmers' Bulletin No. 28.)

Farm Drainage. By C. G. Elliott, C. E., Member of the American Society of Civil Engineers, Peoria, Ill. Pp. 24, figs. 6. (Farmers' Bulletin No. 40.)

The Manuring of Cotton. Condensed from an article by H. C. White, Ph. D., in Bulletin No. 33 of the Office of Experiment Stations. Pp. 16. (Farmers' Bulletin No. 48.)

Sorghum as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist. Pp. 20, fig. 1. (Farmers' Bulletin No. 50.)

Milk as Food. Prepared in the Office of Experiment Stations. Pp. 39, charts 2. (Farmers' Bulletin No. 74.)

Experiment Station Work—V. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 78.)

The Peach Twig-Borer; An Important Enemy of Stone Fruits. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 16, figs. 5. (Farmers' Bulletin No. 80.)

The Manufacture of Sorghum Sirup. By A. A. Denton, Medicine Lodge, Kans. Pp. 32, figs. 9. (Farmers' Bulletin No. 90.)

Millets. By Thomas A. Williams, Assistant Agrostologist. Pp. 28, figs. 6. (Farmers' Bulletin No. 101.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review. August, 1900. Vol. XXVIII, No. 8. Pp. 321-370, figs. 4, charts 8. Price 10 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (No. 29 for October.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

Birds of the Yukon Region, with Notes on Other Species. By Louis B. Bishop, M. D. Pp. 47-100. (Reprint from North American Fauna No. 19, Division of Biological Survey.)

#### REPRINTS FROM BULLETIN No. 26, DIVISION OF ENTOMOLOGY.

Observations on *Diabrotica 12-Punctata* Oliv. By A. L. Quaintance, Experiment, Ga. Pp. 35-40.

Notes on Coccidæ of Georgia. By W. M. Scott, Atlanta, Ga. Pp. 49-54.

Insects of the Year in Ohio. By F. M. Webster. Pp. 84-90.

GEO. WM. HILL,  
*Editor and Chief.*

Approved:

JAMES WILSON,  
*Secretary of Agriculture.*

## NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the **Superintendent of Documents, Union Building, Washington, D. C.**, and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than **one copy** of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.



This circular will be sent regularly to all who apply for it.

No. 400.

# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., November 30, 1900.

### MONTHLY LIST OF PUBLICATIONS.

[November, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Report of the Secretary of Agriculture, 1900. Pp. 76.

CONTENTS: Summary—Weather Bureau—Bureau of Animal Industry—Division of Chemistry—Division of Entomology—Division of Botany—Section of Seed and Plant Introduction—Division of Vegetable Physiology and Pathology—Division of Pomology—Division of Agrostology—Experimental Gardens and Grounds—Division of Biological Survey—Division of Soils—Division of Forestry—Office of Public Road Inquiries—Office of Experiment Stations—Section of Foreign Markets—Division of Publications—The Library—Division of Statistics—Seed Division—Division of Accounts and Disbursements—The Paris Exposition awards—Affiliation of allied lines of work—Need of laboratory buildings—Difficulty of retaining expert assistants—Experimental farm at Arlington—Silk culture.

American Grasses—III. (Illustrated.) Descriptions of the Tribes and Genera. By F. Lamson-Scribner, Agrostologist. Pp. 197, figs. 137. (Bulletin No. 20, Division of Agrostology.) Revised edition. Price 15 cents.

The Manufacture of Starch from Potatoes and Cassava. By Harvey W. Wiley, Chief of the Division of Chemistry. Pp. 48, pls. 8, figs. 17. (Bulletin No. 58, Division of Chemistry.) Price 10 cents.

Descriptions of machinery and processes for making starch from potatoes and cassava—Uses of potato starch—Sizing machines, etc.

The Composition of American Wines. By W. D. Bigelow, Second Assistant Chemist. Prepared under the Direction of H. W. Wiley, Chief Chemist. Pp. 76. (Bulletin No. 59, Division of Chemistry.) Price 5 cents.

A compilation of analyses of American wines, statements in regard to the interpretation of the analytical results, and description of the best methods now in use for the analysis of wines.

Accessions to the Department Library. July–September, 1900. Pp. 19. (Library Bulletin No. 33.) Price 5 cents.

Spot Disease of the Violet. (*Alternaria violæ* n. sp.) By P. H. Dorsett, Associate, Division of Vegetable Physiology and Pathology. Pp. 16, pls. 7. (Bulletin No. 23, Division of Vegetable Physiology and Pathology.) Price 10 cents.

Results of investigations of diseases affecting cultivated violets.

Blackleg: Its Nature, Cause, and Prevention. By Victor A. Nörsgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 23, fig. 1. (Circular No. 31, Bureau of Animal Industry.) Revised edition.

Chicory Growing. By Maurice G. Kains, Special Crop Culturist. Pp. 12, figs. 3. (Circular No. 29, Division of Botany.)

Describes uses for chicory, where it is grown, how to cultivate it, its enemies, yield, and profit.

How to Control the San Jose Scale. By C. L. Marlatt, First Assistant Entomologist. Pp. 6. (Circular No. 42, second series, Division of Entomology.)

Describes the different means of controlling the San Jose Scale.

Monthly List of Publications, October, 1900. Pp. 4. (No. 394, Division of Publications.)

The Crop Reporter. Vol. 2, No. 7. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three-column quarto publication devoted to agricultural topics.

Report of the Chief of the Division of Soils for 1900. By Milton Whitney. Pp. iii, 67-83, fig. 1. (From Annual Reports Department of Agriculture, 1900.)

#### REPRINTS.

Notes on the Mosquitoes of the United States: Giving Some Account of their Structure and Biology, with Remarks on Remedies. By L. O. Howard, Ph. D., Entomologist. Pp. 70, figs. 22. (Bulletin No. 25, new series, Division of Entomology.) Price 5 cents.

Earth Roads: Hints on Their Construction and Repair. Compiled by Roy Stone, Special Agent in Charge of Road Inquiry. Pp. 20, figs. 11. (Bulletin No. 8, Office of Road Inquiry.) Price 5 cents.

State Aid to Road-Building in New Jersey, by Edward Burrough, Chairman of the New Jersey State Board of Agriculture and State Commissioner of Public Roads. Pp. 20. (Bulletin No. 9, Office of Road Inquiry.) Price 5 cents.

Wide Tires. Laws of Certain States Relating to Their Use, and Other Pertinent Information. Compiled by Roy Stone, Special Agent in Charge of Road Inquiry. Pp. 16. (Bulletin No. 12, Office of Road Inquiry.) Price 5 cents.

Historical and Technical Papers on Road Building in the United States. Compiled under Direction of Roy Stone, Special Agent and Engineer. Pp. 52, figs. 7. (Bulletin No. 17, Office of Road Inquiry.) Price 5 cents.

Peach Leaf Curl: Its Nature and Treatment. By Newton B. Pierce, In Charge of Pacific Coast Laboratory, Santa Ana, Cal. Pp. 204, pls. 30, figs. 10. (Bulletin No. 20, Division of Vegetable Physiology and Pathology.) Cloth. Price 30 cents.

This is a Congressional edition. The Department's quota will be exhausted in supplying peach growers throughout the country, whose names are on file at the Department, and miscellaneous applicants are referred to their Senators, Representatives, or Delegates for copies of this publication.

Information Concerning Game: Seasons, Shipment, and Sale. By T. S. Palmer and H. W. Olds, Assistants, Biological Survey. Pp. 20. (Circular No. 31, Division of Biological Survey.)

REPRINTED FROM THE SIXTEENTH ANNUAL REPORT OF THE BUREAU OF ANIMAL INDUSTRY, 1899.

Experiments with Texas Fever and Southern Cattle Ticks. By E. C. Schroeder and W. E. Cotton. Pp. 33-52.

A Report Upon the Examination of Milk. By E. A. de Schweinitz. The International Congress for the Consideration of the Best Methods for Checking or Curing Tuberculosis. By E. A. de Schweinitz. Culture Media for Biochemic Investigations. By E. A. de Schweinitz. Pp. 147-153, 126-133, 145-146.

Report Upon Experimental Exports of Butter, 1898-99. By Henry E. Alvord, C. E., Chief of Dairy Division. Pp. 153-243.



Statistics of Oleomargarine, Oleo Oil, and Filled Cheese. By R. A. Pearson, M. S., Assistant Chief of Dairy Division. Pp. ii, 287-320, diag. 1.

Foreign Markets for Eggs and Poultry. By Henry E. Alvord and Newton B. Ashby. Pp. 321-345.

#### FARMERS' BULLETINS.

Beans, Peas, and Other Legumes as Food. By Mary Hinman Abel. Prepared under the supervision of the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 10. (Farmers' Bulletin No. 121.)

The geographical distribution of the legume family, representatives of which are found in all climates and countries, is given, and their nutritive value, nitrogenous constituents, and digestibility are discussed.

Experiment Station Work—XVI. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 122.)

CONTENTS: Liming grass lands—Early plowing for wheat—Grafting grape cuttings—Olives—Nuts as food—Coffee substitutes—The working of a pure-food law—Feeding moldy corn—Selling eggs by weight—Flavor of eggs—Unfermented grape juice.

#### REPRINTS.

Barnyard Manure. By W. H. Beal, of the Office of Experiment Stations. Pp. 32, figs. 7. (Farmers' Bulletin No. 21.)

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 32. (Farmers' Bulletin No. 22.)

Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)

Onion Culture. By R. L. Watts, B. Agr., Instructor in Horticulture at the University of Tennessee and Horticulturist of the Tennessee Agricultural Experiment Station. Pp. 31, figs. 3. (Farmers' Bulletin No. 39.)

Facts About Milk. By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29, figs. 8. (Farmers' Bulletin No. 42.)

Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association. Under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)

Experiment Station Work—I. Prepared in the Office of Experiment Stations. Pp. 31, figs. 10. (Farmers' Bulletin No. 56.)

Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under supervision of the Dairy Division, Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 57.)

Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. 9. (Farmers' Bulletin No. 63.)

Experiment Station Work—III. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 69.)

The Principal Insect Enemies of the Grape. By C. L. Marlatt, M. S., First Assistant Entomologist. (Reprinted from the original plates from the Yearbook of the U. S. Department of Agriculture for 1895.) Pp. 23, figs. 12. (Farmers' Bulletin No. 70.)

- Some Essentials in Beef Production. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 24, figs. 17. (Farmers' Bulletin No. 71.)
- Tomato Growing. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture, Rutgers College, New Brunswick, N. J. Pp. 30. (Farmers' Bulletin No. 76.)
- Fish as Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 85.)
- The Vegetable Garden. By Charles H. Greathouse, A. M., Division of Publications. Pp. 24, figs. 8. (Farmers' Bulletin No. 94.)
- Three Insect Enemies of Shade Trees. By L. O. Howard, Entomologist. (Reprinted, with some annotations by the author, from the Yearbook of the Department of Agriculture for 1895.) Pp. 30, figs. 11. (Farmers' Bulletin No. 99.)
- Experiment Station Work—XI. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 103.)
- Notes on Frost. By E. B. Garriott, Professor of Meteorology, Weather Bureau. Pp. 24. (Farmers' Bulletin No. 104.)
- Experiment Station Work—XIII. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 3. (Farmers' Bulletin No. 107.)
- Farmers' Reading Courses. (Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey.) Pp. 20. (Farmers' Bulletin No. 109.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

- Report of the Chief of the Weather Bureau. 1898-99. (In two volumes.) Volume II. Report on the International Cloud Observation, May 1, 1896, to July 1, 1897. Pp. 787. Charts 79.
- Monthly Weather Review. September, 1900. Vol. XXVIII, No. 9. Pp. 371-424. Fig. 1, charts 13. Price 10 cents.
- Daily River Stages at River Gage Stations on the Principal Rivers of the United States. Part VI. For the Years 1896, 1897, 1898, and 1899. Prepared under the direction of Willis Moore, Chief of Bureau, by H. C. Frankenfeld, Forecast Official. Pp. 83. (Weather Bureau No. 227.)

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (No. 30 for the month of October.)

Meteorological Chart of the Great Lakes. (Contains data concerning fogs, wrecks, rainfall, November storms, and storm tracks, etc.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATION NOT AVAILABLE.

- Objects of the Association of Economic Entomologists. By Clarence P. Gillette, Fort Collins, Colo. Pp. 5-15. (Reprint Bul. No. 26.)

GEO. WM. HILL,  
*Editor and Chief.*

Approved:

JAMES WILSON,  
*Secretary of Agriculture.*



This circular will be sent regularly to all who apply for it.  
No. 401.

# United States Department of Agriculture,

## DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., *December 31, 1900.*

### MONTHLY LIST OF PUBLICATIONS.

[December, 1900.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

National and State Dairy Laws. Compiled and abstracted by R. A. Pearson, M. S., Assistant Chief of Dairy Division. Pp. 110. (Bulletin No. 26, Bureau of Animal Industry.) Price 10 cents.

Brief abstracts of all National and State dairy laws now in force and the full texts of those which have been enacted since 1898.

Laws Regulating the Transportation and Sale of Game. By T. S. Palmer and H. W. Olds, Assistants, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of Biological Survey. Pp. 89, pls. 9. (Bulletin No. 14, Division of Biological Survey.) Price 10 cents.

A digest of the State laws now in force which affect the trade in game.

Contributions from the U. S. National Herbarium. Vol. VII, No. 1. Monograph of the North American Umbelliferae. By John M. Coulter and J. N. Rose. Pp. 256, vii, pls. 9, figs. 65. Price 20 cents.

The Use of Water in Irrigation. Report of Investigations made in 1899, under the supervision of Elwood Mead, Expert in Charge, and C. T. Johnson, Assistant. Including Reports by Special Agents and Observers W. M. Reed, W. H. Code, W. Irving, O. V. P. Stout, Thomas Berry, S. Fortier, R. C. Gemmell, G. L. Swendsen, and D. W. Ross. Pp. 253, pls. 50, figs. 18. (Bulletin No. 86, Office of Experiment Stations.) Price 30 cents.

Experiment Station Record, Vol. XII, No. 3. Pp. viii, 201–300. Price 10 cents.

Experiment Station Record, Vol. XII, No. 4. Pp. vi, 301–400, fig. 1. Price 10 cents.

The record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

NOTE.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.



**The Forest Nursery: Collection of Tree Seeds and Propagation of Seedlings.** By Geo. B. Sudworth, Dendrologist, Division of Forestry. Pp. 63, frontispiece, pls. 5, figs. 11. (Bulletin No. 29, Division of Forestry.) Price 10 cents.

Information for farmers and others interested in tree planting. How to secure forest tree seeds and to raise seedlings at a small cost.

**The Crop Reporter.** Vol. 2, No. 8. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

A three-column quarto publication devoted to agricultural topics.

**The Basis for the Improvement of American Wheats.** By Mark Alfred Carleton, Cerealist, Division of Vegetable Physiology and Pathology. Pp. 87, frontispiece, pls. 10, figs. 5. (Bulletin No. 24, Division of Vegetable Physiology and Pathology.) Price 10 cents.

Results of investigations of a number of problems connected with cereal production and a study of the wheat industry generally, made for the purpose of establishing a basis for the improvement of American wheats.

**Some Diseases of New England Conifers: A Preliminary Report.** By Hermann Von Schrenk, Instructor in Botany, Henry Shaw School of Botany, Special Agent, Division of Vegetable Physiology and Pathology. Pp. 56, pls. 15, figs. 3. (Bulletin No. 25, Division of Vegetable Physiology and Pathology.) Price 10 cents.

Results of investigations of diseases of forest trees of New England. Descriptions of the diseases and remedies.

**The Wilt Disease of Cotton and Its Control.** By W. A. Orton, Associate Pathologist. Pp. 16, pls. 4. (Bulletin No. 27, Division of Vegetable Physiology and Pathology.) Price 5 cents.

Results of investigations of the wilt disease and suggestions for its control.

**Cooperative Grass and Forage Plant Investigations with State Experiment Stations.** By Thos. A. Williams, In Charge of Experimental Work. Pp. 14. (Circular No. 8, Office of the Secretary.)

Result of conferences with the authorities of certain experiment stations in the West regarding the forage conditions and needs of the States, and the possibilities of undertaking cooperative grass and forage plant investigations between the stations and the Department through the Division of Agrostology.

**Agrostological Notes.** By F. Lamson-Scribner and Elmer D. Merrill. Pp. 10. (Circular No. 27, Division of Agrostology.)

The circular is scientific in its character, and is of interest to the student of systematic agrostology.

**List of Bulletins and Circulars issued by the U. S. Department of Agriculture and Available for Free Distribution.** Corrected to October 15, 1900. Pp. 24. (No. 247, Division of Publications.) Sixth edition.

**Monthly List of Publications, November, 1900.** Pp. 4. (No. 400, Division of Publications.)

**Duty of Water in the Gallatin Valley.** By Samuel Fortier, C. E., Professor of Irrigation Engineering, Montana College of Agriculture and Mechanic Arts. Pp. ii, 175-196, pls. 2, figs. 3. (Reprinted from U. S. Department of Agriculture, Office of Experiment Stations Bulletin 86—The Use of Water in Irrigation.)



## REPRINTS.

Experiments on the Metabolism of Matter and Energy in the Human Body. By W. O. Atwater, Ph. D., and F. G. Benedict, Ph. D. With the Cooperation of A. W. Smith, M. S., and A. P. Bryant, M. S. Pp. 112. (Bulletin No. 69, Office of Experiment Stations.) Revised edition. Price 10 cents.

The Honey Bee: A Manual of Instruction in Apiculture. By Frank Benton, M. S., Assistant Entomologist. Pp. 118, frontispiece, pls. 11, figs. 76. (Bulletin No. 1, new series, Division of Entomology.) Third edition. Price 15 cents.

A Short Account of the Big Trees of California. Prepared in the Division of Forestry. Pp. 30, pls. 17. (Bulletin No. 28, Division of Forestry.) Price 15 cents.

How to Distinguish the Different Mosquitoes of North America. By L. O. Howard, Entomologist. Pp. 7, figs. 3. (Circular No. 40, second series, Division of Entomology.)

## PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Report of the Chief of the Weather Bureau for 1900. By Willis L. Moore. Pp. 15. (From the Report of the Secretary of Agriculture.)

Monthly Weather Review. October, 1900. Vol. XXVIII, No. 10. Pp. 425-476, figs. 17, charts 10. Price 10 cents.

West Indian Hurricanes. By E. B. Garriott, Professor of Meteorology. Prepared under direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 69, charts 7. (W. B. No. 232.) Price 15 cents.

## Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (No. 31 for the month of November.)

Meteorological Chart of the Great Lakes. (Contains data concerning fogs, rainfall, December storms and storm tracks, etc.)

Snow and Ice Bulletin for Tuesdays, December 4, 11, 18, and Wednesday, 26. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

## PUBLICATION NOT AVAILABLE.

Our Present Knowledge of the Kidney Worm (*Sclerostoma Pinguicola*) of Swine. By Louise Tayler, B. A., M. S., Assistant, Zoological Laboratory, Bureau of Animal Industry. Pp. 612-637, figs. 16. (Reprinted from Sixteenth Annual Report of the Bureau of Animal Industry, 1899.)

GEO. WM. HILL,  
*Editor and Chief.*

Approved:

JAMES WILSON,  
*Secretary of Agriculture.*



## NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of **three** general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Yearbook usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for distribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the **Superintendent of Documents, Union Building, Washington, D. C.**, and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than **one copy** of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.